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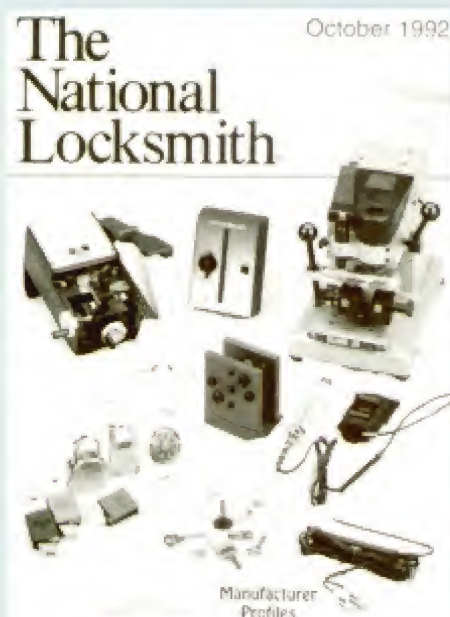
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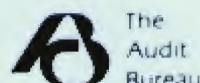
On The Cover

Featured this month are products from just a few of the manufacturers profiled in our special feature beginning on page 29. (Clockwise from top left): HPC, Inc.; Briggs & Stratton; Silca Keys U.S.A.; MDS Inc.; Jet Hardware; American Lock Co.; and Major Manufacturing (center). Be sure to use our rapid reply service to receive free information from these companies and all others featured in this issue.

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Commentary

Hurricane!...and random notes

Hurricane Andrew tore into Southern Florida with a terrible vengeance at the end of the summer season. It has left many people devastated and homeless. Many businesses were also wiped off the face of the map due to the 160 mile per hour winds and rain.

Among those whose livelihoods were ruined by the hurricane were several locksmiths and their families. Not long before this writing, I received a call from locksmith Roy Renderer of Florida. Roy is the kind of guy who cares about other people, and he along with some of the associations were attempting to set up a fund to help the affected locksmiths.

If you are able to help, please contact Roy Renderer at (305) 944-0469. A fund called the Disaster Fund for Locksmiths has been set up with the First Union Bank in Miami. Money is needed to help these people re-establish their business and their lives. In next month's issue, I will give you more detail about how the funds are being used to help distressed locksmiths. Roy himself marked up duplicate keys by a quarter and is donating the extra money to the fund. Can you help?

In last month's issue, on page 62 appeared Carl Cloud's article *Opening A Lord Safe*. Unfortunately, due to a slip in our usual procedures, the article ran with a great number of typographical errors. Also, an illustration accompanying the article was inadvertently omitted. We regret the inconvenience, and we apologize to the readers and author. In an upcoming issue, we will republish the story.

Our December issue will be the 1993 Locksmith Directory edition. We have already mailed directory questionnaires out to all the organizations on our mailing list. If you wish to be listed in the directory and have not received a questionnaire, please contact our office at once. Directory sections are published on Manufacturers, Distributors, Schools, Alarm Monitoring Companies, Sales Reps, and Associations.

Please call us immediately if you wish to be listed but did not receive a questionnaire.

With all the natural disasters that have been occurring lately, this may be a good time to take a look at your insurance. I can tell you from experience, it is good to have. You may recall that a few years back, our offices were hit by a storm. That little wind caused about \$150,000.00 in damages to our building and its contents. Then, earlier this year, we were broken into and burglarized. That adventure cost us several thousand dollars worth of computer equipment.

Insurance is something you need to have, but you never want to actually use. I hope you are aware that if you keep business materials in your home, your homeowner's insurance does not cover those materials.

For example, imagine you have tools, inventory and machines in the house worth \$30,000.00. If there were a fire, your homeowner's policy would pay for the damage to the house and personal property. But it will not pay for the \$30,000.00 in locksmith stuff.

Now I'm not on commission from the insurance industry! But the right policy could save your hide someday. Ask your agent how to protect yourself. Then get a couple of other quotes. I hope you never, ever need it. But I sure did!



Marc Goldberg
Editor/Publisher

October 1992 5

Letters

Comments, Suggestions and Criticisms

The National Locksmith is interested in your view. We do reserve the right to edit for clarity and length. Please address your comments, praise, or criticism to Editor, The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107. All letters to the editor must be signed.

U.S. Manufacturer Warns Against Copied Products

Dear Marc:

There is an element in our society today that is profiting from the hard work, creative talents and costly start-up expenses of legitimate manufacturers here in America. Consumer, Beware! The "foreign-made" products may look good in the package, but please give them *your stress test* before you consider selling it to your customer.

Scotsman Security Products has had their tubular key machines copied from time to time by overseas bandits. Several times they have been so bold as to ask us to take the bottom cover off our key machines as we were demonstrating them at trade shows so that these bandits could photograph the insides of the machine. Others have written us letters requesting the individual drawings of parts with dimensions and tolerances, each time under the guise of wanting to sell our machines in their country. When we refuse to

cooperate, it is not long before we get an order from one of our distributors to drop ship a key machine overseas. Each time a copy of our tubular key machine has arrived on the market, our sales decline for a short while, then our customers call us and sing the now familiar "piece of junk" blues.

Now our DorGard II has been copied by Taiwan and sold in America by a company who takes so much pride in what they sell that they won't even associate their name with the product.

Their imitation product "looks like" our DorGard II at first glance, even to using the line drawing from Scotsman's catalog to decorate the outside of their box. Inside is an exact duplication of our instruction sheet we provide with each DorGard II. The copying is so complete that they reproduced our catalog line drawing and instruction sheet without any corrections or changes. Unfortunately, *they did not use the same materials and processes as is stated in the literature they copied.* That, my friends, is false advertising as well as a flagrant abuse of American business ethics. To tell it like it really is, it is fraud! Those so-called American businessmen who sell this product here in the United States have either lost or never had a moral value that makes this country so great. Greed and the easy buck seem to dominate their motives. Most manufacturers in

this country do not object to good, honest competition; in fact, it is very healthy. This is a realization that makes this country great.

Good, honest competition creates an atmosphere in a manufacturing facility to take a good close look at each phase of manufacturing, from the cost of the material to make the product, to each phase of machining and outside processing costs. It makes us ask hard questions as to where can processes be improved, new procedures created to reduce costs, etc., without compromising the end product.

For those of you who visited our booth in Baltimore at the ALOA Convention, you saw the results of our "destruction test" we did not only on the look-alike foreign product, but of our own DorGard II as well.

Each faceplate was secured into a vise and hit with force. The foreign-made faceplate bent 90 degrees almost immediately like a knife cutting melted butter. After repeated strikes, our DorGard II bent only slightly in one direction and would not bend or twist in all the other directions. Hand drilling was easily accomplished on the foreign product because the material is so soft. Scotsman's faceplate is, as advertised, Heat Treated 17-4 Stainless Steel. Properties in Heat Treated 17-4

Continued on page 96



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Technitips

Helpful Hints from Fellow Locksmiths



Send me your Technitips. Who knows, you may be our next winner! c/o The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107

by Robert Sieveking

October's Best Tip

Hard pressed to supply a customers request for two "key retaining #701 American padlocks, I found a way to make the locks I had on hand key retaining." The key retaining function prevents the key

American 700 Series Padlock



from being removed when the lock is in the unlocked condition. The lock shackle must be locked, in order to release the key.

Unlock the lock, and remove the lock cylinder. (See illustration 1.) Use a #42 drill, to bore a hole in the rear of the lock plug, as you see in the illustration. Drill the hole approximately 3/16" deep, and install a 3/32" roll pin. The pin

should be long enough to protrude from the rear of the plug, as high as the offset in the plug. Grind or file the pin, level with the step, or raised portion, of the plug.

When the modified cylinder is installed into the lock, it will be prevented from rotating to the "key pull" position, when the shackle is not locked. When the shackle is locked, the plug will be free to

These Prizes Awarded Each Month!

All-Lock A-7000 VATS Decoder
HPC Pistolpick
Silca Rubberhead Keyblanks (100 blanks)
ESP PR-13 Professional Lock Pick Set
Sieveking Products EZ-Pull GM Wheel Puller

Submit your tip and win!

How To Enter

All you need to do to enter is submit a tip, covering any aspect of locksmithing to The National Locksmith. Certainly, you have a favorite way of doing things that you'd like to share with other locksmiths. Why not write it down and submit it to: Robert Sieveking, Technitips' Editor, The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107.

Tips submitted to other industry publications will **not** be eligible! So get busy and send in your tips today. You may win cash merchandise, or even one of many key machines or code book sets! At the end of the year, we choose the winners of the listed prizes.

Last year dozens of people walked off with money and prizes. Wouldn't you like to be one of the prize winners for 1992? Enter today! It's a lot easier than you think!

Every Tip Wins 'Locksmith Bucks!'

Yes, every tip published wins a prize. But remember, you must submit your tip to *The National Locksmith* exclusively. Each and every tip published in Technitips wins you \$25.00 in Locksmith Bucks! Use this spendable cash toward the purchase of any books or merchandise from *The National Locksmith*. You also receive a Bonded Locksmith bumper sticker and decal. Plus you are now eligible for the really big prizes!

Best Tip of the month prizes!

If your tip is chosen as the best tip of the month, you will win \$50.00 in cash as well as \$35.00 in Locksmith Bucks! Plus you will receive a quartz Locksmith watch, a Bonded Locksmith bumper sticker, decal and a Locksmith Cap. Plus, you may win one of the annual prizes.

rotate to the key pull position and be removed.

Steven Beaupre
Massachusetts

All-Lock VATS Decoder Winner

I think the readers will be interested in the arrangement of the wafers in the '91 Ford Escort and Mercury Tracer locks. The locks appear to use the 10 wafer system, but in actuality, only the last seven cuts of the key are used. The ignition lock appears to be of the same design as

some Mazda column mounted locks. The ignition lock is a sidebar lock, having tumblers very similar to other Ford sidebar locks.

As you see in illustration two, the ignition cylinder uses the last six cuts of the key. The door locks use cuts 7 through 2. The first three positions of this key are decoys. They are found on original keys, but they find no wafers, in any of the locks of the car. The depth and space information is the same as the current 10 wafer system.

To originate a key to this auto, I suggest you read or disassemble a

'91 Ford Escort 10 wafer? lock system

	10	9	8	7	6	5	4	3	2	1	
BOW	—	—	—	dr	dr	dr	dr	dr	dr	dr	TIP
				ig	ig	ig	ig	ig	ig	ig	

Illustration 2

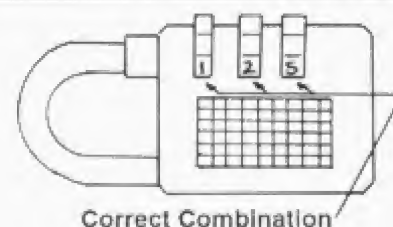
door cylinder, to make an operating key for positions 7 through 2, then progress the #1 position of the key, to fit the ignition. Impression is not a viable option for these locks.

Timothy Boyea
Wisconsin

HPC Pistol Pick Winner

This Technitip is for finding the combination to a Prestolock keyless padlock. You'll need good light for this Tip.

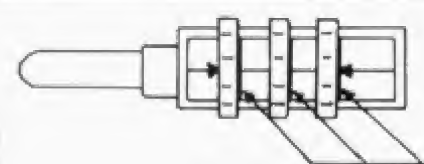
Hold the padlock sideways, with the dials facing you, as you see in illustration three. As you rotate a



Correct Combination

Illustration 3

dial/wheel, push it slightly to the left. This will create a small space between the lock body and the right side of the wheel. You will see what looks like a roller bearing. Rotate each wheel until you see a blank spot. Repeat this procedure for the other two wheels. When all three have been positioned as described, turn the lock away from you as you see in illustration four. The



Spaces

Illustration 4

three numbers you see against the body of the padlock will be the correct combination.

Rick Duskiewicz
New York



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Silca Keyblanks Winner

I was recently asked to make a key for "The Club," auto steering wheel lock. This unit is designed to frustrate a car thief, by preventing the steering wheel from being turned. After going through my key stock, I found that the Taylor X-6 key was a good substitute for the original key. The head style is different, but the key works perfectly. Some "Clubs" may be found with the reverse of an X-6 keyway. In this case, use an X-10 blank.

Bruce Smith
Oregon

ESP Pickset Winner

As the locksmith trade moves closer to the alarm installer business, I find that I need to fish a wire up through a wall cavity now and then. Most times I work alone, so this Technitip is one that does not require a helper. This Technitip is a method that I have found very useful.

I purchased about 18 feet of "bead chain" at a local hardware store. This is the same material that is used to tether sink stoppers and provide a pull for an occasional closet or attic light fixture. To one end of the chain I fastened a split key ring, large enough to prevent that end from entering the hole in the wall. To the other end I soldered a ring terminal lug. This made a smooth transition to the chain, so that it would pass through a hole without catching on anything.

In the spot I need to fish the wire, I drill a 1/2" hole. Directly below this hole, and behind the base shoe or toe moulding, I drill a 1/8" hole through the floor into the basement. Gently pry out the moulding with a small flat pry-bar. This prevents damage to the trim, and allows you to cover your hole. Stick a long wire through the hole, and into the basement, to make the location easy to find. Locate the hole, in the basement, and drill a 7/8" hole, up through the sub-floor and 2 x 4 bottom plate of the wall, into the stud cavity.

It's actually fun to drop the bead chain down into the wall chamber, leaving a foot or so lying on the 2 x 4 plate at the bottom of the stud cavity. Then, with a stiff wire (a coat hanger with a small 90 degree bend in it will do nicely), I run up into the stud chamber, from the basement, and twist it a few times. Often, this is all

that is necessary. The ring lug, on the chain, provides a convenient place to tie off the wire to be fished up through the wall.

Merle J. Hyldahl
New York

E-Z Pull GM Wheel Puller Winner

This little Technitip is a great way to remove top slides or spring covers from rim and mortise cylinders. I have also found this method effective when disassembling small pin tumbler cabinet locks and push locks for sliding doors. Use a standard fine

Spring covers remove easily with a hack saw blade.

Tap the tip of the blade, down and toward the rear of the cylinder

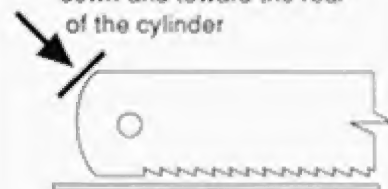


Illustration 5

tooth hack saw blade, as you see in illustration five, to grip the slide cover and slide it out of the dovetail groove

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Continued from page 12

the door to equal or better than original.

Jeff Rosen
New Hampshire

Lately I have started carrying a small folding table with me on installation jobs. The kind used to hold snacks or drinks on the patio. This little bench acts as a temporary work bench, to hold my drill and small hand tools while I install a deadbolt or service a safe lock. Disassembling a safe wheel pack on your knees, or working with your tools scattered on the floor is for the young guys. Save your back, and look a little more professional. You'll do better work, and be less likely to lose a part if you get up off the floor a little.

R. Lazich
Wisconsin

After cutting a few keys on my Foley Belsaw 200 machine, and lubricating the cutter shaft, I began to notice that the lubricant was being thrown out of the pulley shaft. I examined the machine, and decided

that a shield of some type was needed. I looked around, and found a 35 mm plastic film can. I removed the top, and cut out the bottom. Then I split the canister lengthwise, and punched a 3/16" hole in it, to secure the shield to the top of the key machine. The hole is located so that it can be forced over the grease fitting, on the housing, to position the shield. Slide the shield over the pulley shaft, and anchor it by pushing the grease fitting through the hole. This Technitip will eliminate those tiny black grease specks on your clean white uniform shirt. I'm sure this same technique will work on most key machines.

Douglas Door
Ohio

This car opening Tip is one I have found particularly handy on those auto that have hard or extremely tight weather strip. I use the handle end of my Slim Jim, between the weather strip and the glass, to open a small area for the tip of my wedge. Once the wedge is started, the Slim Jim can be removed.

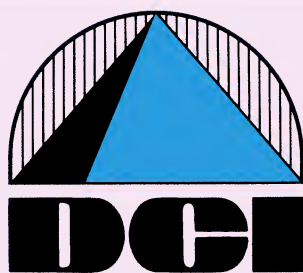
If you have a real tight door, or one

with a metal strip along the bottom of the glass, preventing your wedge from entering as far as you would like, you can bend the Slim Jim slightly, to ride over the obstruction as you insert it into the door. Then insert the wedge on the outside of the Slim Jim. The wedge tip will glide over the metal channel, and the Jimmy can be removed. This simplifies opening a spot for your inspection light or opening tool, and prevents damage to the rubber or the glass.

Juanita Ramsey
Texas

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**Technips Editor
The National Locksmith
1533 Burgundy Parkway
Streamwood, IL 60107**



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News-makers

New Products and Industry News

Integrated Ventures Adds To Spring Line

Integrated Ventures Springs is proud to announce the latest addition to its spring line for locksmiths. This new item is a "spring replacement kit" designed to fit the Russwin® Forum® old style deadlocking latches as well as the Corbin equivalent.



The kit includes five deadlocker springs, three main latch springs and complete instructions with diagram for this easily serviced latch. The same springs are used in either 2 3/8" or 2 3/4" backset deadlocking latches.

This #RF-8 spring kit is now available and will service up to eight latches.

Integrated Ventures Springs offers a full line of spring kits and assortments for the locksmithing industry.

For FREE Information
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JLM Wholesale Accepts Visa & Master Card

JLM Wholesale now can receive payment with either Visa or Mastercard. When placing an order just indicate that you want to pay with your credit card and they will process your order the same day.

For FREE Information
Circle 386 on Rapid Reply

Silca Introduces 1993 Mazda Keys

As you probably know Mazda has introduced a new key on the 1993 RX7, 626, and MX6 cars. Silca Keys U.S.A. manufactures the primary key in both regular and rubber head styles. Silca blanks are made to exact tolerances to insure accuracy.



For FREE Information
Circle 387 on Rapid Reply

Rodann's ST-10 Exit Alarm

Rodann Electronics introduces its newest access control "exit alarm." Model ST-10 was designed to control unauthorized entry and exiting by sounding an 85db siren every time the door was opened. An electronic key switch accommodates any controlled access and a bright red and white warning sign deters all unauthorized use.

This unit is reasonably priced.



For FREE Information
Circle 388 on Rapid Reply

ESP's Pin Tumbler Mail Box Lock

Responding to many requests from locksmiths, ESP Corporation has introduced a hex nut mounted version of their pin tumbler mail box lock.

The company indicates that the locks meet U.S. Postal Service specifications and like the clip mounted pin tumbler mail box locks, use the ES9 keyblank.

Since the locks have removable cams, ESP has made them available in a universal package with various cams satisfying most replacement applications.



For FREE Information
Circle 389 on Rapid Reply

Monaco Lock's New Catalog

Monaco Lock Company, Inc. is proud to present its new Vol. 8 catalog, "A Universe of Product." This complimentary full-line catalog, as those in the past, includes over 600 pages of product descriptions, charts, wiring diagrams, and dimensions needed to assist you when preparing a job or ordering. Most items in the catalog are in stock and can be shipped nationwide the same day your order is placed.

Monaco's complete product line of electric strikes, electro-magnetic locks, electro-mechanical deadbolts, door hardware, and accessories are backed by the manufacturer's warranty and Monaco Lock's 25 year reputation of reliability and customer service.

For FREE Information
Circle 390 on Rapid Reply

Continued from page 16

Star Key Issues Key Blank Supplement

Star Key Industries, Inc. announces the issuance of a new key blank supplemental directory. The supplemental directory illustrates eight new domestic automotive blanks and 12 new foreign automotive blanks. Also profiles are six new cylinder lock blanks, including two Medeco™ numbers.

The new directory replaces several supplemental slips previously disseminated announcing new Star Key blanks, and integrates those slips into one four-page source. The new directory also contains a full conversion table, listing all Star Key blanks not contained in its Catalog, No. 353.

**For FREE Information
Circle 391 on Rapid Reply**

Detex Introduces New Access Control Hardware

Detex Corporation completes the popular Dentco III Access Control product line with the introduction of the new DS-1950 magnetic card swipe reader.



Designed to provide single door access control by restricting entry only to those individuals with assigned magnetic strip cards, the DS-1950 provides ease of operation and reliability through the use of a high speed reader and dedicated micro-processor-controlled electronics. Installers will find the DS-1950 installation flexible by virtue of surface mounting of the reader and remote location of the electronic control module.

**For FREE Information
Circle 392 on Rapid Reply**

Sara Probasco To Offer Additional Seminars

Sara Probasco is now offering additional seminar topics for locksmith groups. Her original seminar is entitled The Business of Locksmithing. The two new topics include Advertising & Public Relations, plus Motivational Techniques For Small Business. The latter seminar is called Get Moving. All these programs run for eight hours.

Plus, Don Probasco is offering an eight hour seminar for novice to intermediate locksmiths. Called Trouble-Shooting In The Field, he covers a wide variety of locksmith problems and situations, and how to handle them. A four hour seminar covers padlocks, service, sales and history. Another four hour seminar covers padlocks, service, sales and history. Another four hour seminar teaches the installation and service of the Lori Lock and Adams-Rite lines.

Together the Probasco's are offering a special on their seminars. When your group books both Sara and Don, for the same weekend, the second eight hour seminar is half price.

**For FREE Information
Circle 364 on Rapid Reply**

Continued on page 20



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Continued on page 20



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Continued from page 18

Trans-Atlantic Company's Catalog Available

Trans-Atlantic Co., an importer of commercial and residential grade builders and security shelf hardware now has its 1992 edition catalog available. Many new innovative products are available.

For FREE Information
Circle 365 on Rapid Reply

Dorma's 640/650 Adjustable Spring Closer

To offer a simple solution to accessibility code compliance, Dorma has enhanced its 640/650 series door closer line to include adjustable spring power and a resized closer body which greatly expands its retrofit capability.

The newly engineered line features two ranges of spring adjustment. The 640/650 is adjustable from size 3 through 6, primarily for exterior doors, while the 641/651 can be adjusted from spring sizes 1 through 4



for accessibility applications on both interior and exterior doors.

Because spring power is adjustable with the turn of a hex wrench, the 640/650 line can be custom-tailored to meet the demands of various door environments. As a result, the door's closing force can be optimized while it retains an opening force low enough to meet barrier-free requirements. Compliance with the accessibility codes has become imperative with the January 1992 enactment of the Americans with Disabilities Act (ADA).

For FREE Information
Circle 366 on Rapid Reply

WeslockNational Debuts Novelty Gift Lock

WeslockNational has introduced SportsLock™, a sporty interior passage lockset that incorporates a knob that looks like a sports ball.



According to James Gleason, vice president-marketing, SportsLock is the first lockset to be offered as a novelty gift item. "However, the lockset is a sturdy, fully functioning lockset made from steel and brass."

Designs include a baseball, basketball, football and soccer ball in authentic colors. Additional sports and new sport-related designs will be offered in the future.

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by Tom Seroogy

The 1992 Cavalier

"A locksmith who knows his trade can make a key without fear. I'll give you two ways to go with this job."

Outside of the General Motors VATS system, no other GM auto has created so many problems for the locksmith as the new 1991 and 1992 Cavalier ignition.

The response, of course, has been a monumental quantity of articles giving full discourse on each authors' particular "approved" method and the "new labor saving devices" needed for making a key. Unfortunately, most of these methods, while feasible for the author and anyone else with his level of experience and expertise, exceed the skill levels of the locksmith norm.

This is not to say generating a key for the Cavalier ignition is easy, or doesn't require a degree of proficiency. Rather, it means that a locksmith who knows his trade can make a key without fear and without having refined a particular (and sometimes unneeded) skill necessary to some methods.

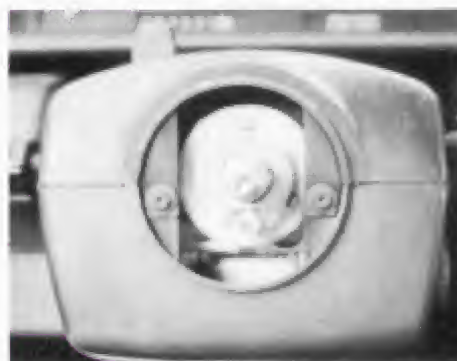
This article addresses two methods of making an ignition key for the Cavalier with automatic transmission. The first method is a little faster and preferred because it does not require the dismantling of the ignition housing and ignition, but does demand a higher degree of skill. The second method is easier, but takes more time.

Both procedures require removing the steering wheel before dismantling the two-piece column shroud. The steering wheel removes like other GM wheels, and has a pull-off horn pad. (See photograph 1.) Removing the steering wheel is needed to expose two of the five screws holding the shroud together (See photograph 2.) All the screws we removed were either a torx T-15 or T-25.

After removing the screws, we lifted up on the front of the top shroud half and pulled it toward us. (See photograph 3.) At the back of this part are a pair of clips that interlock with



1. The '91 Cavalier steering column.



2. Steering wheel removed.



3. Separating the shroud halves.



4. Removing the fragile plastic facecap.

the bottom half. To try and pry the two halves apart at this point will break the shroud.

Removing the shroud exposes the ignition switch, windshield wiper control arm, and turn signal/light dimmer arm. In both procedures we removed the ignition facecap. (See photograph 4.) Be careful, it breaks very easily. At this point we separate methods.

Method 1:

1. With the facecap removed, measure back 1" from the face of the lock, at the center of the keyway. (See photograph 5.)



5. Mark housing 1" back from facecap.

2. Drill a small access hole through the housing and cylinder wall until you reach the sidebar on the plug (See photograph 6.) Make sure and keep the drill square to the ignition housing while drilling.



6. Drill a small access hole to sidebar.

1. Remove the ignition facecap and the windshield wiper arm assembly. Loosening two T-25 torx screws allows the assembly to be removed and exposes the wire harness connector for detachment. (See photograph 9.)

2. Next, remove the two cylinder retaining pins. One will be found on top, right beneath the wiper assembly that was just removed, and the other will be at the bottom. Drill next to the pins and gently pry out (See photographs 10 and 11.) The ignition cylinder will slide out of the housing approximately one inch and no further (See photograph 12.) *Do not pry or otherwise force the ignition out of the housing!*



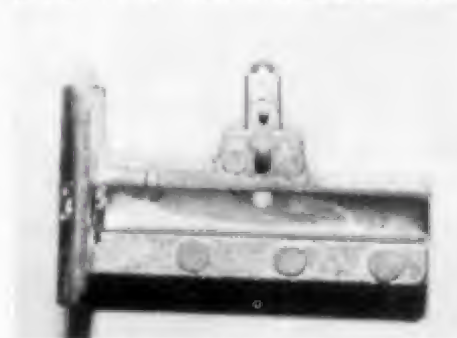
12. The ignition will only come out about 1 inch. The shifter/key interlock saddle and release button (the peened in square area with the cable end and plastic slide visible) will not allow the cylinder to be removed.

3. At this point we are going to stop and explain why the ignition cannot be removed from the housing, and how to affect its removal.

As seen in photograph 12, the ignition has a small area just in back of the cylinder that holds the shifter cable and a white plastic slide attached to the cable.

This is the shifter/key interlock system used for the automatic transmissions. With the ignition "OFF," the shifter is locked in "PARK." When the car is running and the shifter is in gear, the ignition cannot be turned to the "OFF" position.

The metal piece that the cable and plastic piece ride in we will call the shifter/key interlock saddle. The



13. Saddle with release button in position.

saddle is comprised of two pieces: the large channeled piece in which the cable and slide are seated, and the shifter/key release button located in the center of the saddle. (See photograph 13.)

When the ignition is in the "OFF" position, a cam section on the tailpiece of the cylinder forces the release button down into a detente in the plastic slide, preventing the slide and shifter cable from moving, thus locking the shifter in place.

When the ignition is in the "ON" position, the cam on the tailpiece moves out of the way of the button allowing the slide to move when the shifter is moved. With the shifter out of "PARK," the release button is raised just behind the cam section. Should an attempt be made to turn the ignition "OFF," the raised release button blocks the cam and prevents it from turning to the "OFF" position.

While serving as a vital safety precaution in the operation of the vehicle, it is this saddle and release button that prevent the cylinder and plug from being extracted from the housing. (See photographs 14 and 15.)

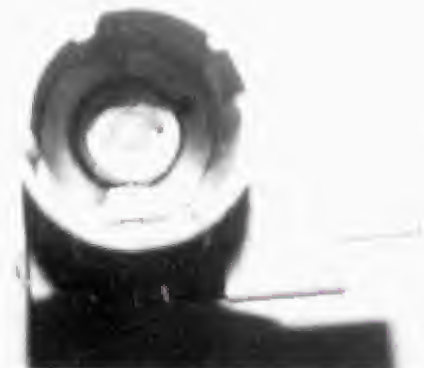
Continued on page 26



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Continued from page 24



14. The saddle in its home position blocks the ignition's tailpiece from being removed.



15. There is room to remove the tailpiece once the saddle has been moved out of the way.

4. To remove the saddle, carefully eliminate the peened section holding it in place. (See photograph 16.) We used a cordless dremmel tool and cutting wheel with great success. Then gently pry the saddle forward. (See photograph 17.) It will slide out only a small amount because of other housing parts being in the way.

5. Pulling the saddle toward yourself, depress the shifter cable connector found behind and under the ignition cylinder, and pull the cable and slide out of the housing. (See photograph 18.)

6. With the cable removed, gently pull out and twist the saddle clockwise to remove the ignition cylinder. (See photograph 19.) Be careful not to lose the shifter release button! (See photograph 20.) It may pop out of its seat! Now you're ready to make the key.

7. From the ignition cylinder, remove the steering wheel lock shaft and spring (make note as to its position in the cylinder) and the two



16. A cordless dremmel tool easily removed the peened area.



17. Saddle can now be pulled out.



18. Disconnect shifter cable and slide.



19. The ignition now slides right out.



20. Saddle and release button clearly visible in the housing.

metal facecaps. (See photograph 21.) From here there are three ways to proceed:



21. The ignition in pieces.

a. Insert keyblank into the plug and read the wafers from the back of the lock.

b. Use two picks or shims to shim the lock from the back and rotate until the plug can slide through the cylinder. (See photograph 22.) Or,



22. Two picks used to shim the plug from behind, allowing it to turn and slide out the front of the cylinder.

drill an access hole for the sidebar, then pick and rotate the plug until it slides through the cylinder. The plug will not be able to be fully removed, however, as the tailpiece will not pass through the cylinder. But it will be exposed enough to where the wafers and sidebar are visible and can be read after inserting a keyblank.

c. Same as option b, except drill and remove the pin holding tailpiece to plug. This will allow for the whole plug to be removed from the cylinder. (See photograph 23.)



23. Removing the pin that holds the tailpiece to the plug allows the plug to separate from the cylinder.

Reassembly

To avoid the duplication of work, reinstall the lock in this manner:

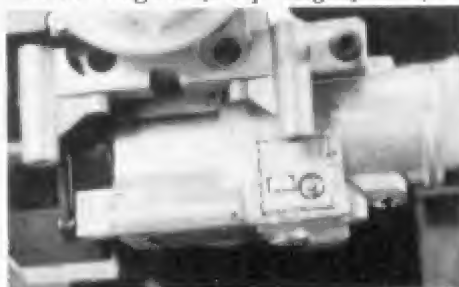
1. Reassemble plug and cylinder.
2. Pull out on the saddle and slip the ignition cylinder back into the housing. Make sure the shifter/key release button is seated in the saddle properly. (See photograph 24.)

3. Install one of the cylinder retaining pins just enough to hold the ignition in place.



24. Replacing cylinder into housing.

4. Place the saddle back into position and peen it at only 2 or 3 places. This will make it easier to remove should the ignition need to be removed again. (See photograph 25.)



25. The cylinder, saddle, shifter cable and slide are temporarily installed.

5. Turn the key to the "ON" position. Slide and snap into place the shifter cable and slide. The cable and slide will not go into the saddle unless the key is in the "ON" position — Do not force!

6. Test ignition and shifter for proper operation. If all is well, put in second cylinder retaining pin and drive both pins home, then permanently peen the saddle down. (See photograph 26.)



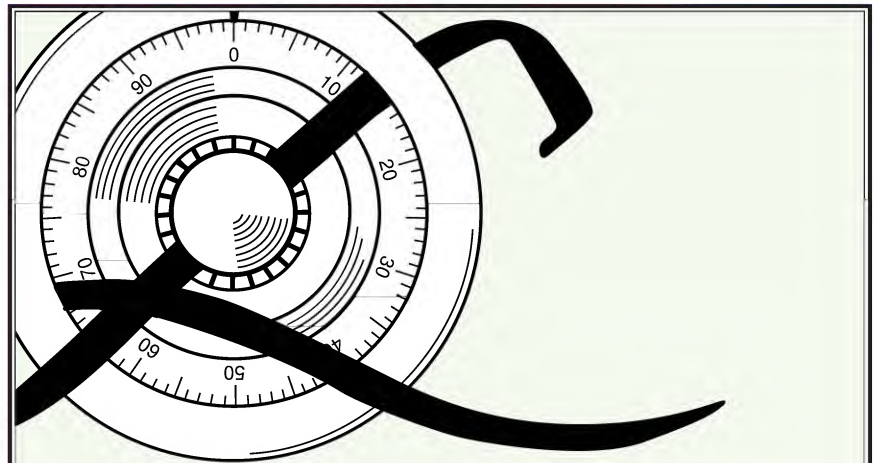
26. Saddle and cylinder finally installed.

7. Replace the plastic facecap and reassemble column.

Specifications for the 1991-92 Chevrolet Cavalier

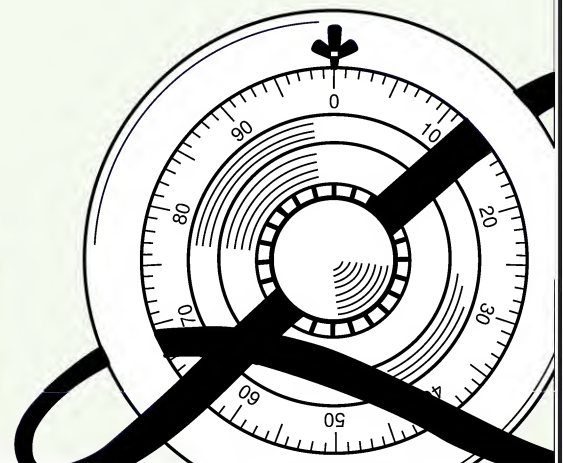
Ignition: Double bitted, 6 alternating wafer tumblers with sidebar. Keyblank: Ilco P1099, or B68 Code Series: 1991 Cavalier OOJO-99J9 Code Card: XF206, Not released, no release date available.

Spacing: 1-.413; 2-.512; 3-.610; 4-.709; 5-.807; 6-.905. Depths: 1-.347; 2-.324; 3-.300; 4-.277; 5-.253. §



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Company News...

Manufacturer Profiles

Here is an inside peek at a number of the companies manufacturing products for the locksmith market.

AAA Products International

AAA Products International started as a manufacturer of quality pneumatic control valves in 1954. These valves are used in automatic packaging machines, petro-chemical plants; in aerospace, nuclear submarines, and in many other applications.

A few years ago, a local locksmith expressed a need for better more modern locksmith tools, and the Jiffy Lock Tool Division of AAA Products International was born.

Following is a list of patented Jiffy lock tools in the order that they were introduced. First, the popular Jiffy MA-1 Key holding impressing tool. The Jiffy MT-1 Tubular key holding impressing tool. The Jiffy Superfast Canfeed and Quick Space Attachments for the popular HPC 1200 CM code machine which are recommended by HPC. The Jiffy GM-1 door and trunk lock cap clincher. The Jiffy all steel ML-7 locksmith's vise and the all angle ball mount for the ML-7 vise. Next, the Jiffy Clear View car door tool CV-55 for open viewing inside car doors. Then the Jiffy SL-120 Halogen Super Light Probe that lets you see the whole inside of a car door, even in bright sunlight.

The latest tool is the Jiffy JBH battery holder that lets locksmith's use their Makita® or Makita® look alike rechargeable tool batteries to power the SL-120 super light probe for opening cars and other uses.

The goal of AAA Products International is to design and manufacture quality lock tools that are patented and completely different from anything that has been made before. Jiffy Lock Tools are designed to make the locksmith's job easier and to save precious time.

AAA Products International uses the latest Coordinate Measuring

Machine (CMM) to check lock tool parts in millionths of an inch. Also the latest CNC (Computer Controlled) machining centers and CNC lathes for precision machining each lock tool part exactly to specification.

Jiffy Lock tools are available through distributors. AAA products welcomes a visit from anyone who would like to see modern locksmith tools in use and in production.

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Adesco Safe Manufacturing Company

Glen and Gene Halls joined forces and introduced the Adesco Safe Line at the 1976 A.L.O.A. show in Anaheim, California. Serving the individual locksmith and the safe sales store, is considered a top priority with the company. Adesco is now in its 16th year of growth adhering to a policy of focusing its sales efforts on reaching the individual locksmith who will actually be selling and servicing the safe. The company policy of dealing directly with the locksmith provides excellent service with larger discounts and lower prices to its valued customers.

Unique to Adesco is serendipity from the original Star Safe & Alarm Inc. Service division. Servicing all makes of safes in the field has shown them where the weak spots are that cause mechanical failure and loss of funds. This knowledge has translated into designs that combine better money protection with a long trouble free product life. An additional benefit is keeping in touch with the changing requirements of society. This results in new product designs such as the home composite safe to provide above floor convenience.

Adesco serves its large customer

base from two manufacturing locations. The Corporate headquarters in Paramount California serves the west coast. The Tucker, Georgia plant (established in 1979) serves the South and East coast keeping freight costs to a minimum.

Glenn Halls and Dee Diederich have retired from the industry to more leisurely pursuits. The present company officers are: Gene Halls, President; David Halls, Executive Vice President; Chuck Basso, Vice President Star Safe & Lock Service Division; Steve Mitchell, Manager-Georgia Division.

**For FREE Information
Circle 394 on Rapid Reply**

American Lock Company

In 1912, following his arrival from Hungary, John Junkunc worked as a railroad machinist in Boise, Idaho. As a natural mechanic and inventor, he designed and built a number of small tools which were used to make his work a little easier. One of these small inventions was a keyless (combination) padlock which he invented out of necessity because he was constantly misplacing keys for the regular padlocks used on the job.

As a result of the popularity of the combination padlock invention, John and his family moved to Chicago where he began a manufacturing operation in the expanded basement of his family home. In 1919, the company moved to larger facilities and acquired the American Lock Company, a manufacturer of cylinders. More inventions followed, most notably the now famous double ball-locking mechanism, which is recommended by the National Crime Prevention Institute.

Throughout the years, American Lock Company added innovative

American Lock

Continued from previous page

products and packaging used in the security industry, including five, six and seven pin tumbler padlocks, shackleless locks (Series 2000), and the 747 shrouded shackle padlock. The solid steel Model 700 continues to be the flagship padlock.

Because of its progressive involvement in the industry and constant monitoring of current market trends, American Lock continues to introduce new products including a Multi-Cylinder system, built to upgrade existing interchangeable cylinder padlocks, the 20 and 40 series solid brass padlock and a Safety Lock-Out system providing color-coded aluminum body padlocks for easy identification.

Most recently, American Lock Company introduced two new products: The Defender Series, Model 710 and Model 711, which offers superior strength, corrosion resistance and serviceability; Four new Rim & Mortise keyways, Corbin 60 keyway, Corbin 67 keyway, Russwin D1 keyway and the Sargent LA keyway. These innovative new products confirm American Lock Company's continued growth in the security industry.

For FREE Information
Circle 395 on Rapid Reply

Arrow Lock

Arrow Lock Manufacturing Company, founded in 1949, is a fully owned subsidiary of Securitas Lock Group, Inc. Securitas, a U.S. company and leader in guard services and alarms, purchased Arrow Lock in 1991 from Essex Industries. Under this new management, Arrow Lock will remain an independent operating company.

Arrow Lock's corporate offices and product manufacturing plant are at the same location in Brooklyn, New York. This arrangement allows Arrow management to oversee the product development, manufacturing, marketing, and distribution activities of the company on a daily basis. Arrow Lock manufactures and markets a complete line of commercial grade heavy duty locks, as well as door closers and exit devices. They have an excellent brand name recognition at both the distributor and end-user levels. Their products are sold through a network

of locksmith wholesale distributors, contract hardware distributors, door distributors, and original equipment manufacturers. Arrow Lock is dedicated to selling their products through the distribution channels already established. In the future, Arrow Lock wants to further penetrate the retrofit distribution market outside its present geographical territory. They also plan to continue with their aggressive marketing approach as "The Alternative" in the contract hardware/new construction industry.

Arrow Lock is known for their excellence in meeting customers' needs and requirements. They attribute their position in the marketplace to their competitive prices and delivery times, as well as their improved order entry procedures. Arrow Lock is continually introducing new locks and lock hardware which comply with the ADA requirements. In addition, they are presenting a new registered and insured key program known as Arrow Key Security (AKS). This program will enable the building owner to have complete key control.

For FREE Information
Circle 396 on Rapid Reply

Briggs & Stratton

Briggs & Stratton is a leading manufacturer of automotive locks and keys. The company has been in the business of supplying quality automotive parts since the turn of the century. Founded by Steven Foster Briggs and Harold Mead Stratton, the company developed several innovative automobiles before building its reputation as an automotive parts supplier.

Today, from the 318,000-square foot manufacturing plant located in Glendale, WI, Briggs & Stratton Technologies produces up to 250,000 lock sets a day, some with up to two dozen parts. The company provides approximately 70% of all locks and keys to the domestic automotive market. In addition, door handles, compartment latches, precision components for other lock manufacturers and locks for industrial, RV and marine use are also manufactured by Briggs & Stratton Technologies.

Once manufactured, the

automotive lock and key aftermarket stock is delivered daily to the nearby 440,000-square foot warehouse in Menomonee Falls, WI. The inventory in this high-tech warehouse is controlled by computer, with almost no margin of error.

Briggs & Stratton's commitment to the locksmith began early in the company's history when service manuals were published with detailed application information. Today the service manuals, instructions and product literature provided by Briggs & Stratton Technologies are among the most comprehensive in the industry. In addition to printed literature, the company sponsors training classes where locksmiths and distributors get hands-on, how-to demonstrations in the latest locksmithing techniques.

Providing tools for used by the locksmith is also a company tradition; the first tool being the key cutter complete with a code book, so the locksmith could reproduce almost any automotive key. One of the latest tools produced by Briggs & Stratton Technologies for the locksmith is the crimping tool, introduced at the 1992 ALOA trade show. A pinning tool and capping vise, the product is really two tools in one. Unique to the domestic automotive market, the crimping tool can be used for General Motors, Chrysler and Ford automobiles.

For FREE Information
Circle 397 on Rapid Reply

Don-Jo Mfg. Inc.

Don-Jo Mfg. has been making lock accessories since the fall of 1981. The company started in a 103 year old wood building in Leominster, MA with two products to offer: the ST 161 3, LP 211-CP. As business and demand grew the company expanded their product mix to include security strikes as well as filler plates.

In 1985 Don-Jo hired its first independent sales representative, Tri-Power Marketing, with an eye towards the national marketplace. This goal was accomplished by the end of that same year with a national sales force in place and distribution from coast to coast. As business grew rapidly the company always maintained the philosophy of offering quality, american made products at competitive prices.

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HPC

Continued from page 32

compatible software). HPC's latest addition to the 1200 series machines is The Punch Machine™ (1200PCH), it works on the same principle as the 1200CM Code Machine, yet is completely portable. The Punch Machine™ comes with HPC's Little Mac™, enabling you to make your own cards. Recently HPC started manufacturing ready-made code cards for The Punch Machine™, and will continue to produce a variety of cards for the 1200PCH.

HPC also manufactures a complete line of security key control systems

including metal key cabinets (Kekabs) that range in capacity from 8 to 730 keys (either in a one or two tag system), specialized security cabinets (chemical and medicine cabinets), key control racks and key keeper boxes.

HPC offers an extensive line of door hardware and guard plates. Plus, they offer a wide selection of locksmithing tools, picks and pick sets, core openers and other related products. Everything from pins and springs to precision micrometers and assembly tools are available through

an Authorized HPC Distributor.

HPC is also a publisher of technical manuals, a quarterly publication, textbooks and up-to-date code books and code referencing materials. The code books provide over 9000 pages of lock codes and lock code information from around the world.

HPCSoft, the software division of HPC, produces standard setting software applications for the industry in code management, standard master keying, key blank cross referencing and key control record keeping. HPCSoft's newest program is its Five level master keying software.

HPC Services Division is devoted exclusively to the HPC customer. Through a toll-free 800 number, an HPC Service Technician can answer questions and help with repairs.

Whether you're a novice or an accomplished veteran, HPC is able to fill all of your locksmithing needs, with its wide range of products and services.

**For FREE Information
Circle 351 on Rapid Reply**

Intralock Tools Ltd.

ITL Tools started from a common hobby of Jim Brooks and Gordon Parr. Both were in the true sense of the word computer hackers. In 1984 they decided to join their occupations and hobbies to invent a list of new products. To date three of the original list have been introduced. 1. ITL 9000 computer key machine. 2. ITL 1000 computer dialer. 3. ITL 900 Mobile Master key machine with more still on the drawing boards.

The ITL 9000 is designed to replace the manually operated code machines that are commonly used for cutting original keys. This machine was designed for the professional locksmith market and large institutions such as hospitals, universities, municipal and other government office complexes and military installations. The ITL 9000 can be found where ever there are large numbers of precision keys to be cut.

Once the microcomputer was developed both Jim and Gordon knew that they could make it do the repetitive tasks that they had been doing by hand and so the ITL 1000 computer safe dialer was developed and produced. This machine has been



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successfully opening safes around the world for many years.

The latest development of Intralock Tools is the ITL 900 which has been nicknamed the Mobile Master Key Machine. This machine is both affordable and easy to use and can be used in the mobile van or in the shop. All of the available Manufacturers depths and spaces have been programmed into the ITL 900 memory. The ITL 900 master key system can contain up to 16 submasters with up to 999 change keys under each submaster. This system permits the custom pin drops and automatically removes uncutables from the system. Both a serial and parallel ports are standard for printing an communicating with other computer programs. The ITL 900 is available with 120-VAC or 12-VDC for mobile use. There is also a high security version of this machine for Medeco and Emhart keys.

**For FREE Information
Circle 352 on Rapid Reply**

Jet Hardware Mfg. Corp.

Jet Hardware Mfg. Corp., Brooklyn, NY was founded in 1977, by three very close and good friends who shared the same profession. Alfred Schoenbrod, George Buchinger, and Fred Lange were both engineers, tool and die makers in the Lock and Key Industry. They saw a need for key blanks to be manufactured utilizing the highest quality brass and nickel silver available, precise tolerances and a competitive price for the Locksmithing Industry. To obtain their goal, it was decided that Jet Hardware, would fabricate everything themselves and not to depend on outside vendors. All of the tooling and blanking dies for the various key blanks along with the milling cutters are formed in the tool and die department of Jet Hardware.

Once the base product was completed and marketing began, it then became necessary to consider the esthetics, how they looked. Utilizing the incising method, designs were place on the key bows to simulate the original manufacturers designs. The "DITTO +" line was born ("ditto" meaning the same as everyone else) and the "+" was to indicate that a very neat incised identification symbol placed on the bow in lieu of the various methods

that the industry was using. From the first twenty-five or so key blanks produced in the beginning, today Jet manufacturers close to one thousand line items including tubular, foreign, safe deposit, hotel and pseudo bow key blanks.

To assist the locksmith in their endeavors to offer customers high grade professional service, the Personaline was created. The locksmith can have their firm's name and identification neatly incised into their key blanks. This gives the appearance that the locksmith was not only the duplicator, but the

manufacturer of the blanks. The Unibow series of pseudo blanks was created for these same professional locksmiths and most recently, Jet Hardware acquired from HPC, their Neuter Bow key blank line which broadened this phase of Jet's business.

Jet Hardware also offers key machines and both flat and rotary key display racks.

**For FREE Information
Circle 353 on Rapid Reply**

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Major Manufacturing

Established in 1976 as a family business, Major Manufacturing soon developed and continues to maintain a reputation for innovative product development, quickly responding to the changing needs of its growing clientele. Until William DeForrest, Sr.'s passing in 1990, both he and his son, Bill, took a very active role in all aspects of the business, from development and design of individual products, to production and marketing of their growing catalog of tools and lock-related products. In fact, the company holds numerous patents for its innovations.

"I grew up in the lock business," Bill DeForrest says with pride. He notes that he and his father started Major Mfg. when Bill Sr. designed and produced the prototype for what is still the company's most popular and best-selling product: The Kee-Bloc™.

"Our philosophy," DeForrest says, "has always been to work very closely with the major lock manufacturers and with a variety of locksmiths to ensure that all of our products not only address specific needs within the industry, but also, that they work with as wide a range of brands as possible."

Since the Kee-Block, the company has expanded its catalog with such popular items as their Schlage Cylinder Cap Tool, a special tangle-resistant cylinder spring, and a hardened cylinder guard—all responses Major Mfg. has made to the needs of its manufacturing and locksmith clientele.

Major Mfg.'s latest product is the HIT-1—a drill jig that attaches to a door, making the retrofitting of existing holes for lever-handle locks a breeze; and the jig is designed to work properly with locks from different manufacturers, including Schlage, Arrow, Assa, and Sargent. The HIT-1 is designed so that all the applicable drill points are properly aligned, making laborious measuring and recalculating unnecessary when retrofitting a door to meet ADA Act requirements.

A companion tool is the HIT-2, a multi-purpose mounting nut driver for the Schlage, Arrow, Assa, and Sargent locks.

As Major Manufacturing moves into the mid-1990's under the DeForrest's experienced leadership, it

continues to develop and market new products.

**For FREE Information
Circle 354 on Rapid Reply**

Marks, USA

Marks Hardware was established in 1977 to serve the growing demand for a mortise lock manufacturing company who would meet the needs of an expanding market. Since then, the product line has been expanded to include residential and commercial locksets to meet and exceed the most stringent UL and ANSI specifications. Today's products include mortise, cylindrical and tubular locksets, security storm door locksets and locks for woven wire gates.

Marks' mortise locks are available with many choices of lever, knob or handle trim for commercial or residential applications. Locksets feature thru-bolted trim with screwless knobs and/or levers. These products have been engineered to simplify installation, reduce maintenance and eliminate traditional design problems of mortise locksets. Tubular locksets are offered coordinate with mortise locksets.

The Marks' cylindrical locksets are unique in their very heavy construction and are regarded to be one of the best in the lock industry. ANSI Grade 1 and Grade 2 Series are offered with standard cylinders, in addition to removable core models.

In 1989, the Custom Lockset Division was created to accommodate customers with special requirements of either lock function or design. Thus far, locksets have been developed for the New York City Board of Education, Housing Authority and Department of HPD; Chicago Housing Authority, Los Angeles Unified School District. The Custom Division welcomes the challenge of these special applications.

Marketing of Marks' products is usually through their direct sales force or independent sales representatives. They sell to wholesale locksmith distributors, contract hardware distributors, OEM's and door manufacturers. Normal delivery time of standard catalog products is 4 to 6 weeks.

The company employs approximately 90 people in their 35,000' manufacturing facility located

in Amityville, New York.

George Marks, founder and President, holds a Bachelors Degree in Mechanical Engineering and a Masters Degree in Business Administration. He is also the author of several patents of products now in production at the company.

**For FREE Information
Circle 355 on Rapid Reply**

Mas-Hamilton

The ongoing battle of wits between those who develop locks and those who develop ways to defeat them has been rather one-sided in recent years. Until now, dial lock technology hadn't really changed since the Civil War. That's why conventional dial locks are no match for sophisticated robots and other high-tech methods used by safecrackers of today.

The Mas-Hamilton X-07 changes everything. Its patented electro-mechanical features render all known human, robotic and radiological compromising techniques obsolete. It is the most technologically advanced combination lock in the world.

Innovations like the X-07 do not just happen. In this case, it came from the collective expertise of a highly-skilled team with long experience in research design, manufacturing, computer programming and security management.

Director of the group, and head of security analysis, was Mas E. Hironaka, retired Security Systems Chief, Electronic Warfare Laboratory at Fort Meade, Maryland.

Heading up the design team is President G.L. Dawson and Vice President Tom Cassada, along with Bud Brooks and Dan Thompson, all formerly award-winning design engineers with IBM Corporation. The manufacturing function is handled by Tom Clark, Steven Cornette, Don Schmidt and Craig Williams, a team with many years of experience in the security hardware industry.

Mas-Hamilton is currently setting up a nationwide education program to teach the industry about their new revolutionary lock. Their instructors represent locksmith associations and ALOA chapters from across the country. They are trained at the Lexington office of Mas-Hamilton. These instructors will hold classes all across the country.

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Mas-Hamilton *Continued from page 36*

The Mas-Hamilton Group may be new to you today, but one that will be known for the innovations of tomorrow.

For FREE Information
Circle 356 on Rapid Reply

MDS Incorporated

Medical Diagnostic Services, Inc. (MDS), a Florida Corporation (1972), was organized to conduct sales of specialized products to the Medical/Dental professions.

In February 1979 MDS began selling the major portion of its product line to locksmiths and locksmith distributors. Due to the success of this initial penetration into the Physical Security Industry, the company elected to shift its primary marketing efforts toward this +30 billion dollar industry.

With the continued expansion of their popular Focuscope Universal System and development of other related diagnostic products, MDS has been unable to diversify its sales efforts. They now are a major supplier to the Veterinary as well as the Industrial Markets. Also, MDS has

recently contracted with Mac Tools, Inc., Snap-On Tools, Corp., and Matco Tools to be their only supplier of automotive borescope kits.

The future remains bright with recent introduction of new accessories for the Focuscope as well as a soon-to-be released line of flexible borescopes and endoscopes.

MDS will continue this expansion into other Marketplaces throughout the 90's as they offer unique modular systems with virtually no competition.

For FREE Information
Circle 357 on Rapid Reply

Pro-Lok

Pro-Lok was established 10 years ago as a part-time addition to an existing retail locksmith business. Pro-Lok's popularity soared when they introduced their Original Auto Encyclopedia, making them competitive in the specialty locksmith tool industry.

With the Auto Encyclopedia firmly planted as the industry standard in the auto lockout information field, Pro-Lok continued to introduce unique locksmith tools and expanded

its line. Today Pro-Lok offers over 100 unique products including car opening tools, an expanded line of car opening books, auto lockout tool sets, lock picking tools, and specialty locksmith tools.

In 1991 Pro-Lok also became the manufacturer of the popular KeyMaster key machine. The KeyMaster is a specialty punch machine designed to allow the user to quickly create accurate original keys. The unique design of the KeyMaster allows it to operate with no electricity. This portability makes it ideal for going on-site, making it the perfect machine for industrial and institutional locksmiths working on large master keyed systems.

In 1992 Pro-Lok has introduced several new tools which have expanded their growing line of successful products. The new products include two new car opening tools the "Toyota Tool" and the "Button Finger". There is a new car opening light, that has already become a best seller because of its lifetime warrantee, the AL2000. Also introduced this year is a revolutionary installation solution. Known as the

Continued on page 40



SRi and Steve Young are working together to bring you the best in locksmith tools and supplies.

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Pro-Lok

Continued from page 38

Professional Installation Series, the special Universal Clamp combined with the individual installation templates, makes hardware installation easier than ever.

Pro-Lok is a company on the move. Owned and operated by experienced locksmiths, Pro-Lok offers tools and products that truly meet today's locksmith's needs.

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Scotsman Security Products

Scotsman Security Products continues to manufacture all of their products from their beautiful new facility in Pioneer, California, successfully competing in today's business climate worldwide.

The Irmers take pride in producing high quality tubular key machines, tubular key blanks, and DorGards with a "Made in America" pride of workmanship. Their goal is to keep the quality superior while refining and streamlining the manufacturing operations to endeavor to keep costs at an affordable level. They will not

compromise quality for price.

There are many products on today's market that look like the high quality products you've used for years. But that is where the similarity ends. Copy-cat products are sometimes made with cheap materials, low-quality craftsmanship, shipped to you with no concern for quality control, then sold at a "wonderfully low price."

For twenty-two years, Scotsman has been known throughout the Locksmith Industry as a manufacturer of consistently high quality products, expanding the product line as the need exists, or "improving the proven" product to accommodate new products on the market.

Quality-minded locksmiths everywhere are using Scotsman DorGards to protect their customers storefront doors. Not only are the stainless steel DorGards strong and protect the cylinders and bolt from attack, but they are an attractive addition to the aluminum door.

The response to the full line of DorGards has been overwhelming. DorGard II (mortise cylinder protection) continues to be the top seller, with DorGard III (for flush mounted doors) and the CylGard line

(protective rings) next in sales. But DorGard IV (double door protection) and DorGard V (single center-hung door protection) have captured the imagination and interest wherever they are shown.

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Silca Keys U.S.A., Inc.

Silca Keys U.S.A., Inc. has recently celebrated it's second anniversary in the United States. Silca U.S.A. manufactures in Twinsburg, Ohio and currently produces a top quality line of original-like keys under the brand name of Image in addition to the complete line of automotive nickel plated brass keys and rubber headed keys they carry. A new line called Pronto has also recently been released featuring the simple numbering system used by many businesses. Specialty keys are also handled from this facility.

Comparators are used throughout the manufacturing process to assure no deviation from the proper specifications in both material thickness and millings. Clear, crisp



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coining completes the process before the keys are burnished, plated or lacquered and boxed. All brass, nickel plated brass and nickel silver keys receive the same quality control.

Silca key machines are known all over the world for accuracy and durability. The Bravo USA replaced the "One" that Silca produced for the American market with many improvements. The club cuts Laser/Sidewinder and dimple keys and is the machine most requested by locksmiths all over the world because of its' simplicity and accuracy. The Club Jr. was released to duplicated the Laser/Sidewinder keys at a lower cost for those shops that want a dedicated machine. Other famous Silca machines include the Rekord, Poker, Crown, Cadet, GT40, Scout and the TS1 Stamper. In the rare instance that a repair is required the Twinsburg, Ohio facility can usually repair a machine within 48 hours.

Silca U.S.A. is growing rapidly and has recently expanded by adding a distribution warehouse along with additional production equipment and manpower. In the spring of 1992, Silca U.S.A. added their first series of commercial keys for the U.S. market

along with a new catalog showing their expanded line. Plans are to continue expanding until they are able to offer the total range of keys used in the United States.

Contact your local distributor for information and pricing.

**For FREE Information
Circle 360 on Rapid Reply**

Slide Lock Tool Co.

Slide Lock Tool Company was established in 1983 by Doug Selby. Doug, now 37, prides himself as an early pioneer in the industry with nearly 10 years experience cataloging the history of automotive lock systems. He first introduced the original Slide Lock Tool used to open the horizontal lock systems of the early days.

Since then he has made his own Slide Lock Tool and most other lockout tools obsolete when, in 1988, after two years of research and development, he received a patent on the versatile Z-Tool and published the 1st Edition Z-Tool Manual. The geometric design of the revolutionary tool changed the lockout technician's professionalism and

expertise as they could now open any model that could be opened within the door cavity with just one tool. In 1990, Doug added the Autobuster II Tool and in '92, the tool of the 90's - the Japanese Tool. With the 5th Edition '93 Manual due out this month, these three working tools can run an entire lockout service. With over 50,000 sets now in use around the world, this company has proven to be a consistent leader in the industry.

Doug says the reason for the success of his company is due to the specialization and concentration of the company doing nothing but tracking the history of auto lock systems finding the safest and easiest opening method that everyone can execute. It's a full time job keeping the users of the Z-tool system up-to-date. There is far more involved to logging the history of lock systems that people would think as new models are constantly being introduced and those introduced in the 90's are much tougher and more time consuming to research than ever before.

**For FREE Information
Circle 361 on Rapid Reply**

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New Product...

Ford Progression Guide

"The new 10-cut Ford Key Progression Guide allows you to cut an ignition key in 25 minutes or less."

It has been almost nine years since Ford first introduced their 10 cut lock system. This change in lock design immediately produced a corresponding change in the way these locks were serviced. In the older Ford double sided system, (1965-1984) it was often possible to pick a Ford door lock to gain entry or impression a Ford door or ignition lock in order to get the customer a working key.

These procedures are not practical with the 10-Cut Ford system. Since 1984, the generally accepted method of getting your customer a working 10-Cut Ford ignition key was to make a key for the door lock, then completely replace the existing ignition lock with a new one. Several drill templates and other items entered the marketplace to facilitate the destruction of the existing ignition lock so a new one could be keyed and inserted in its place.

When we are on a job where the customer has lost their keys, obviously time is of the essence. It is our decision, as working locksmiths, to make the most economical use of our time, get the customer started and on their way as soon as possible. The amount of existing sales of replacement Ford ignitions are a testimonial to the fact that traditionally most locksmiths felt drilling and

replacing a Ford ignition was the most time efficient way to service a customer without keys.

Compared to servicing the old Ford locks, this procedure was time consuming, expensive for the customer and with the advent of new electronics, airbags, etc. has become an even more involved procedure. Is there a professional, reliable method to make keys for 10-cut Ford with ignition lock disassembly? Perhaps you have considered the concept of cutting 10-Cut Ford ignition keys using the progression method. Cutting by progression is certainly nothing new. It is a mainstay for most people who regularly service General Motors products. What locksmiths asked for was a Ford progression system that was easy to use, both on the bench and in the field.

This is precisely why Locksmith's Choice Products has invented an all new 10-Cut Ford Key Progression Guide. This Guide is becoming the preferred method for locksmiths to make a Ford ignition key for several reasons.

First, the Progression Guide works! This Guide was designed by a veteran locksmith with ten years experience in our industry and was extensively field tested. Before being brought to

market, the Guide was independently field tested by a Certified Master Locksmith. The progression system is foolproof. You will get an operating key for any working Ford ignition using the standard 10 pin system.

Second, the Progression Guide is extremely efficient. In most cases, you can make a door lock key, and using the Guide, cut an ignition key in 25 minutes or less. Field tests have shown the majority of locks require cutting only 3-4 key blanks before finding the proper cuts. In field testing rarely did any vehicle go beyond the seventh key.

Possibly the best thing about this Progression Guide is its convenience. The entire guide is enclosed in a heavy duty, high quality 8 1/2" x 11" slide chart. This chart can be hung on a hook in your truck, or kept in a tool box. It is even hole-punched for a three ring binder! You will never have to fumble through any books or pages. All of your information, including "goof-proof" instructions are included right on the chart. The Guide is economical with a suggested price of \$29.95. It is available only through locksmith wholesalers.

For a list of wholesalers or more information contact: Locksmith's Choice Products, P.O. Box 389, Madison, WI 53705. §

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by Shirl Schamp

Car Opening Made Easy

"This area of locksmithing continues to be a profitable one despite increased competition for various sources."

For some time now, we have been carrying on a running discussion on various way of opening locked cars. This area continues to be a profitable one for locksmiths despite competition from other sources. One of the tools that we'll talk about this month is the Door Jack from ABC Lock Co. of Omaha, NE.

The Door Jack is a device used to create an opening between the door and the frame into which you can pass an opening tool. The jack can be inserted either on the top edge of the door or on the side, between the door and the center post. Use which ever location provides the easiest access from your opener to the lock.

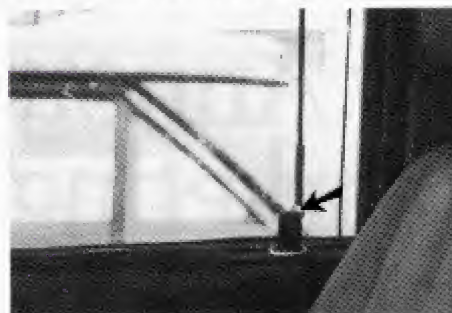
Insert the Door Jack as you see in photograph one. The round knob on the jack tightens down, prying the door out from the car. Be sure you only tighten it the amount needed to create a space to pass your tool. If you are a real gorilla, it is possible to damage the door, so use only the pressure needed. In the photo, you can also see that I have passed a tool through the opening created with the jack.

In photograph two, you can see that the car opening tool I am using is one that can be purchased at almost any hardware store. It is a "grabber." You simply push down on the button, spreading the prongs on the other end. Push down on a button as we had on this car, then relax the button. The prongs then close on the button and you can pull it up. It's funny, but I carried one of these tools for years and I always assumed that it was only useful for picking up things I had dropped down into a door panel.

Oh, I had tried it on buttons before, but those grabbing little fingers wouldn't hold on tightly enough went I went to pull the tool up to unlock the car. The fingers would slip off. Now take another look at photo one. You'll notice that I am holding the tool by the



1. The door jack properly inserted.



2. The grabber tool with the button.



3. Using the jack on the upper door edge, the ABC tool was inserted.

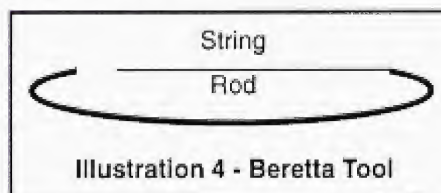


Illustration 4 - Beretta Tool

"T" shaped finger grips, and I am keeping a steady pulling pressure outward on the button. This tightens the prongs on the button enough to allow you to open the car.

As you can see in photograph three, the jack can also be used on the upper

edge of the door. In this situation we have passed another ABC opening tool into the car. They call it a Beretta tool, but it can be used on many cars with slide locks. Illustration four shows the design of the tool.

To use the tool, insert the rod into the door; insert the end of the tool where the string is connected. Place the tip in contact with the slide lock. One of your hands holds the handle of the tool, the other hand controls the tip of the tool with the string. Photograph five shows how you can use the string to pull up the lock button.



5. Using the string to pull the button.

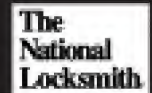
Another type of lock you will run into a lot is found on van and truck windows, as well as sun roofs. Photograph six shows this common clamping lock. Sometimes these windows can be



6. Common window clamping lock.

the easiest avenue of approach because they often can be rapped open. Use a plastic wedge to slightly bring out the glass near the lock. While doing this, rap the glass with the heel of your hand. In fact, I suggest you try rapping even before you bring out the glass, because if the fit is loose enough, it might

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open without wedging. Also, you could lubricate a VW finger tool with dry soap. You can work the tool in under the lock and lift the clamping arm.

When you get one of these locks open, the window only comes out a couple of inches, but then you can easily pass in another tool. I often put in an across-the-car opener. I have bent a blunt hook on the end of mine, and I can use it to pull out a set of keys and bring them out through these windows.

Remember, the object of the service call is to open the locked car. You want to leave the customer as you found them, except they have an opened vehicle, *with no damage done by the locksmith*. A lot of other people will try and work on cars. The difference between a professional locksmith and a kid from the gas station is your knowledge, your expertise, and the fact that you do not damage the car's finish, the windows or the linkage.

Being as the main object is to open the car with no damage, you can choose whatever method works best for you. It does not matter at all how you gain entry to the car if you have done no damage. That is why we are reviewing so many alternatives.

Yet another method of entry is to

visually copy the key. I was once called out on a lockout and I was surprised to find that my customer was Red Skelton. There was a large crowd standing around Red and his locked Rolls Royce. Between the crowd and the celebrity, I was in no condition to open a carton of milk, let alone a Rolls Royce.

The Rolls uses a small pin tumbler Yale lock which I was much too nervous to pick. Plus I was scared to pry or wedge this car in the presence of Red Skelton and his fans. After evaluating this situation, I noticed his door key hanging on a key chain from the ignition. Fortunately, I had Rolls blanks with me, so I took one and visually copied the key that was hanging there. It worked! Everybody applauded, and I could have died of embarrassment, but it proves that a file and a blank can be a valid method of car opening.

If you have trouble visually decoding a key, go to your code book and look up any key that would fit that car. Check the code series to see how many positions or spaces there are, and how many depths there are. Check to see if a number one cut is a no cut. Spacing can be accomplished in a couple of ways, the truest being with your code

equipment. You can either cut each cut as you believe you see it, or you can just mark the position with the cutter. Then you can continue by filing to the approximate depth.

I usually won't bother with the code machine unless I am dealing with a General Motors. On the others, I take my file and place a position on the tip of the key and continue to place positions on the key moving back toward the bow, one file width at a time. Remember, the key only has to work once, and a little wiggling is OK in this situation.

In photograph seven, my husband, Norm, is looking through a monoscope to better view the cuts. These tools are useful, because some-times you can read the code number off the side of the key if it is still present.



7. Norm using the monoscope.

Well, that's all for this month. Keep opening those cars! §



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by Jake Jakubowski

Whispering Down Wells

"I am amazed at the people who 'whisper down wells' instead of standing up and letting the world hear from them."

For most of my working life, I have been fortunate (or unfortunate, depending upon your point of view) enough to have owned, and operated, my own business. At some point, early on, I came across the following, anonymous, poem:

*"They who whisper down a well,
About the goods they have to sell.
Will never reap the golden dollar,
Like they who stand, and shout, and
holler!"*

The inference of that poem is obvious, or at least should be.

Yet, I am constantly amazed at the number of small business people that insist on "whispering down wells," instead of standing up and letting the world know that they have a valuable service to offer.

I think that part of the problem lies in the fact that so many new locksmiths starting out (and some of those that have been at it awhile) have no concept of what business promotion is all about. It seems that their primary thrust is to place an ad in the yellow pages, and have five hundred, or so, business cards printed up.

After giving out 50 of the business cards (twenty went to friends and relatives who already knew who they are, what they're doing, and their telephone number), they put the rest somewhere in their service vehicle, and forget 'em. Then they sit down and wait for the telephone to start ringing.

You've got to admit that such a start can hardly be considered a "shout." In fact, you *might* be generous by calling it a whisper.

Now, there is nothing wrong with giving out your business cards. The point is that you should give them to *everyone* that you talk to (except those relatives I mentioned earlier). It doesn't matter if you're talking about the weather, politics, or the decline, and fall, of the Roman Empire; before you leave that person, hand them your card and

say something to the effect: "Here's my card, if I can help you in any way, let me know. Thanks."

True, you'll give out an awful lot of cards that will wind up in file thirteen ... but every once in a while, one of the people you gave a card to will remember, and call you. Besides, business cards are as economical a means of getting your name out as any you can find. Get in the habit of making sure you have a card-case full of them, in your pocket, every morning, before you leave the house. Then try very hard to give them all away that day... along with just as many smiles.

You should also make it a point to call on three, or four businesses in your area that you have not done work for. Find out from the receptionist, salesperson, or office personnel who is responsible for building maintenance. If you can't see that person that day, leave your card and call back for an appointment.

Don't tell me you "just can't sell." You don't have to. All you need to do is *talk* to the person about what you believe you can do for them. Let them know that you want to help them solve their problem. If you have a list of the services that you offer, leave it with them.

Again, you're not "selling" (you have already told me that you couldn't sell). What you are doing is making yourself visible. You are beginning to "shout". Well, if you are not actually shouting, you are at least beginning to speak up.

Another way to "shout" is to have your service vehicle professionally lettered. Your van, or truck, can be a powerful advertising medium if it is attractively lettered in an attention grabbing way. That vehicle is a virtual rolling billboard. It does its job 24 hours a day, seven days a week, year around.

Personally visit hospitals, nursing homes, motels, convenience stores, etc. Let each one know who you are and

what you do. Leave your card with, or for, the maintenance director, housekeeper, owner, general manager, or all of the above. The more people who know about you, the "louder" you are shouting.

Even visiting the local (Do I dare say this?) hardware store, or (God, forbid!) home center, and ("Is this guy for real?") police department, and talking to the managers, or police chief and leaving one, or more of your business cards, can lead to business for you.

When I was first starting out, one of the biggest paying jobs that I was fortunate enough to land was referred to me by a local hardware store. A nearby home-center continues to recommend our services. So does the police department. In fact, a "part-time" locksmith constantly refers business to us. You never know just how "loudly" a business card can "shout", until you give them away!

All too frequently, we allow ourselves to be negatively influenced by other people's biases regarding who we should try to do business with. Like many of you who are reading this, I have read less than complimentary commentaries about hardware stores, home-centers, and the police. Yet, overall, my experience with all three has been good. Which just goes to prove that arbitrarily deciding that a certain prospect is not worth your time and effort is a fallacy. Consequently, you have to do whatever you *believe* it will take to make sure your "shout" is "heard" by the greatest number of people.

Your concern is to build a profitable, and self-sufficient, business for yourself. In your effort to do that, you cannot afford to not open every door you can, and "shout" into the room...even, if on occasion, that particular room is empty.

A ! method of "shouting" that we use is to have "Push", "Pull" stickers printed

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with our name and telephone on the bottom portion. (See illustration 1.) I put these up every time I do a re-key (where practical), or change cylinders on commercial applications. Illustration two is a sign that we put on back doors of restaurants, etc.. The sticker shown in illustration three is used mainly in industrial and commercial applications where certain doors can easily be mistaken for an exit. Notice that all of them carry our company name and phone numbers.



Illustration 1

Like a well lettered service vehicle, these stickers work continuously at promoting our business. They never get hoarse from telling people who we are, what we do, and how to contact us.



Illustration 2



Illustration 3

Considering how little they cost per unit, and how "hard" they work for us, their "cost-per-contact" ratio is infinitesimal.

The point is, that you must utilize every economical means of getting, and keeping, your name before the business community and general public, that you can think of. Business cards, stickers, vehicle signage, and personal "visiting" are all relatively inexpensive ways of "shouting".

More importantly, they are generally affordable to the beginning locksmith. Further, these methods "shouting" will help generate business until such a time as your yellow page advertising goes into effect. Even after your yellow page ad "kicks in" you don't want to give up on the other "advertising" that you are doing.

Promotion must, of necessity, be a continual, and on-going process. Just watch T.V. any day, or night, of the week. Who do you see continuously advertising their goods and services? America's most successful and well established businesses, that's who. Why? Because they know that they have to continue to "shout" to *keep* the attention of the consumer.

Other alternatives, of course, are newspaper, radio, T.V., and "business" directory advertising. Although these media can "amplify" your shout, the costs can be prohibitive for even a well established shop, let alone a beginner.

If you do not "stand, and shout, and holler" about the goods you have to sell but instead you persist in "whispering down a well," then, you'll be like the fellow I heard about who winked at pretty girls in a dark theater. He knew what he was doing, but no one else did. §



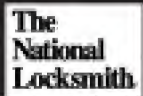
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by Dale Libby

Amsec Star Opening

"This month I am going to explain the Gate Control method of opening a dysfunctional Amsec Star safe."

Into everyone's life some challenges must fall. This is an on going reflection of most safecrackers. In fact, there are safemen like Steve Williams and I who go out of our way to create some new and interesting confrontations every time we go out to open a safe.

"Never do it the same way, is our Hue and Cry!" Well, sometimes we may set off a relocking device to see if we can overcome it and how it can be defeated in a new and exciting manner and procedure. Other times, however, I am lucky to get the safe open in a reasonable time by using standard procedures. This last statement is especially true when working on Mosler Safes. (Next month!)

This month I am going to explain the "Gate Control" method of opening a dysfunctional Amsec Star lift out round door safe. We all have our war stories, and this one was instructional for me.

Most of my safe openings are referrals from other locksmiths and safemen. When they have looked at and tried everything they know, or when time is a factor and they want the unit opened quickly, they will call me. The Amsec safe in question was in a chain fast food store. It was a tube type non-hinged Star lift out door with a slot cut into the head.

This is a very common and good type safe. Most of the problems that occur with this safe are due to the owner/employee dropping the open safe head on the floor after opening. After years of abuse, the back cover will become bent and disfigured from all the plummeting and abuse the head takes as it is dropped unceremoniously to the floor. We have all seen this. To remedy this, a rebuilding of the safe head is in order. More on this later.

The problem with this safe head is that the combination dial could only be turned about one revolution in either

direction. The combination could not be dialed in either direction. This was due to an attempt by some of the employees to fill the safe with liquid and try to "fish" out the already deposited money through the drop slot.

A variety of liquids were used including soap, water, and cooking oil. What a mess. The would-be burglars also beat the safe head and dial with a hammer to try to batter their way into the safe. It did not work.

I like working on Star (Amsec) round door safes. Usually the opening is quick and straightforward. Figure on spending about 10 to 15 minutes and the safe is open. Repairing the unit takes longer, but the whole job can be done in about one hour.

Nothing goes easily in real life. The greatest barrier to my working on this particular safe was its physical location. It was sunken into the floor at the back of an opening between a walk-in cooler and the wall where all the utilities for the building came through the wall.

It was like working in an 18 inch wide alley eight feet long. It was dark, wet, greasy, and generally uncomfortable. Working on a floor safe under these conditions was diabolic and heinous at best. Naturally the safe location was at the back of this narrow crevice. I had to angle myself in this hole to even get to the safe. Onward.

The opening procedure for these round door safes is textbook. With the safe dial located at zero under the dialing (opening) index, mark the position of the hole to drill outside the dial ring. Next, remove the dial and make a mark from the center hole of the combination spindle through your mark.

On this line, measure out 7/8" and drill your 1/4" hole. I do not remove the dial ring and handle for this, because you will need the handle to

drill the hard plate. Another tool that is necessary for drilling floor safes is a vacuum cleaner. Keeping chips from fouling the edges of the safe and keeping the hole and safe clear of drilled material is very important, especially when gravity is working against you.

First you drill through mild steel, about 1", depending on the label of the safe, then you hit the hardplate. Be careful when penetrating the hardplate, because it can rotate when and after it was drilled. If you look after drilling and it is almost all the way through, and you drill again and look and see no hole, it means that it has rotated about the inner tube. Just probe it back until you finish the hole. (See illustration 1.)

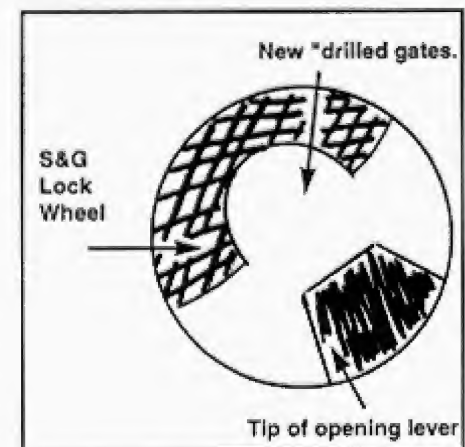
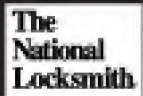


Illustration 1

The next barrier is soft metal that is the cam plate that pulls the three bolts into the open position when the combination is dialed. In fact, this plate holds all the components and parts of the combination lock, including wheels and the opening lever. By drilling at the correct position (see *The National Guide to Safe Opening* for precise drilling location) you will be at the drop-in position for the opening lever.

Once the hole is drilled and vacuumed, at least on a working safe



head, a cut down combination dial can be then used to turn

the wheels. It is fast, because the first combination wheel shows through the hole. This is the first number of the combination.

Sequence of turns is four times left, three times right, two times left, back to zero and push in, Right to stop! You can view this action through this hole you drilled with a small light or otoscope.

On a working unit, the repair is quick and easy. Repair the hole in the safe head, check out the operation of the combination wheel pack, rotate and stake the hardplate at a different location, and the head is ready to reuse. Nothing was that easy on this unit.

Once I generated the perfect hole, I put my cut-down dial on the spindle and turned it. Nothing I could see moved. The wheel pack was frozen in position. The spindle did turn and it did push in at the zero position. That's something, at least.

I really was not bothered by the lack of movement of the wheel pack. I figured that I could probe the wheels into position with an ice pick. This is much easier said than done. I could

not probe the pack more than a few degrees in either direction. Something had frozen the pack in position. Time for wheel gate control.

If one cannot bring the gates to the opening position by dialing, then it must be done by drilling. In effect, you are drilling a new set of gates precisely at the drop-in position. In theory it will work. It does work, though not usually on the first try.

I drilled through the frozen pack, backed out the drill at a slightly acute angle to make sure the gates were opened. With the help of a large hammer I gently knocked and jumped the opening lever into the newly made gates. (See illustration 2.)

Once the lever was in far enough, I turned the dial spindle to the opening position, pushed in and turned. With the help of an ice pick, I was able to turn the cam bolt plate enough to withdraw the three locking bolts. I removed the safe head and handed it to the owner.

I gave him two prices. The first was for rebuilding the safe head. He would have a fully working beat up safe head. Two, I could order a new slotted safe head which would be fully guaranteed, and a new head was only \$25.00 dollars

Proper alignment of holes in spindle to dialing index for "Push" down movement of spindle to OPEN with turn to RIGHT!

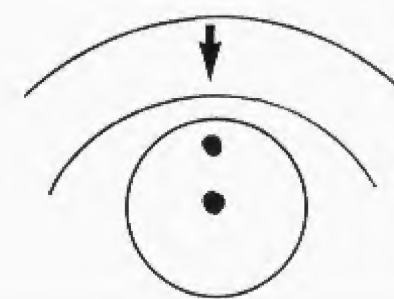


Illustration 1

more than the rebuilt head.

I was stacking the deck. Although I could have rebuilt the safe head and made more money from the parts and labor cost, over that of just the normal markup for a new head, I wanted him to order a new head.

Repairing the old head and rebuilding it is "Labor Intensive." The time saved in ordering a new head is better spent in other pursuits. Rebuilding a Star drilled safe head will be covered in another article where time and space permits. Open and Prosper! §



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Trade Talk...

by Patricia Lilly

Focus On Service

Today's customers are smart shoppers. They want quality products at fair prices and good service."

Customer Service. Tired of hearing about it? Think again. Your competitor probably carries very similar inventory as compared with your shop. So how do you set yourself apart from the others? Customer Service!

When you think about Nordstrom's, what comes to mind? Customer Service. They carry similar inventory to all other large department stores. Nordstrom's is recognized for being a leader and for being innovative in providing their customers the ultimate in service. Look at the Ritz Carlton Hotel Company. Sure, their hotels offer luxury accommodations. But the Ritz Carlton Hotel Company knows how to pamper their guests with, again, the ultimate in service. I'm sure you can call to mind other examples of excellent service. It leaves a lasting impression. Don't you want your customers to leave your store and remember your service with a lasting impression of great customer service?

Today's customers are smart shoppers. They want a quality product at a fair price. They demand service. Today's customers are leading the charge in businesses aiming to improve their customer service.

When a customer walks into your shop, do you immediately greet them with a smile and a warm, friendly, sincere welcome? Do you engage them in small chatter about the weather or some equally insignificant topic? It really doesn't matter what you talk about, just do it (but don't overdo it). This conversation lets them know you are focusing on them.

Ask how you can help them, not if you can help them. Draw them into a conversation focusing on their needs, not what you have to sell them. After discussing their needs, lead them to the appropriate product. Take the time to explain why the product

suits their needs. Ask how else you might be able to help them. Offer to perform installation, if necessary.

Do you offer to perform a security audit of their home? Here's a great opportunity to provide a valuable service and increase sales.

Once the sale is made, don't forget that customer. Remember, you want to build a repeat customer base. Why not call them within a week's time and ask if the product is satisfactory. If it is, offer your assistance if they ever need you in the future. If not, apologize and offer your assistance immediately!

Today's customers are smart. They want quality and demand service.

When you receive a cold call from a potential customer, remember — you only have ten to twenty seconds to make an impression. Greet callers with a warm hello, the name of your shop, and a "How may I help you?" Listen to them and assess their needs. Are they locked out of home, office, a car? Reassure them that help will be on the way and provide them a reliable time frame. Are they price-shopping? Be courteous and be prepared to explain why your price is higher, if it is. Don't be defensive. Do they require other information? Jot down notes during the conversation and remember to record their name as soon as you hear it. It's always courteous to address someone by their name. It also shows them you're listening.

When you perform a service call, take an individual interest in each customer. Introduce yourself and hand them your business card. If they've locked themselves out,

remember they are embarrassed. Take the sting out of the embarrassment. Tell them how frequently this happens, that with people going in so many different directions these days, it's bound to happen to everyone once. When you're through, tell them to stop by to purchase magnetic secret key holders to protect themselves in the future. Get them into your shop!

If installing home or office security services, complement your customer on the pleasant surroundings. Make them comfortable with your presence. Ask them if they have any questions about their current security or future needs. Leave your business card when you have completed the work. Always remember to offer your assistance in the future.

Here's some other ideas that customers have noted leave a favorable impression:

- Dress professionally. Uniforms or a logo shirt instill a trust factor.
- Decorate your shop or window display according to the seasons.
- Do you have a holiday card list? Why not think about it. It really doesn't cost you all that much and it helps to keep your name in front of your customers.

Always remember to be courteous to every caller and walk-in customer. A simple rule of thumb to follow is to treat them as you would want to be treated under similar circumstances.

By practicing good customer service techniques, you will distinguish your shop from the one down the road. Treat your customers well and they'll come back. With referral business, too!

The author is Executive Director of the National Locksmith Suppliers Association which represents distributors and manufacturers of locksmith supply products throughout North America. §

New Ideas...

by Robert Sieveking

Touch Memory

"Let's take a look at some new technology that could revolutionize security as well as locking devices."

For those that have an eye on the future of security technology, the Touch Memory is a real eye opener. This year, at ALOA, I was privileged to meet and have conversation with the product manager of the Touch Memory program at Dallas Semiconductor. I was impressed.

Though mechanical cylinder lock technology will be with us for some time to come, the future of higher security applications and the need to maintain a data trail is at the door. Prototype locksets that utilize the Touch technology are in use today.

Let's see what a touch key looks like and contains. Then, we can better understand some of the applications and imagine the possibilities. The primary uniqueness of this technology over some of the other card readers, "swipe" magnetic strip readers, and proximity technology is the durability of the package and the one wire (plus ground) read/write capacity.

Photograph one shows what most of us will recognize as a GM ignition key and a key ring. The coin shaped device on the key fob is a Touch Memory cell. It is about the size of a dime, and 3/16" thick. That's not very big, for what it can do. Photograph two shows the inside of the "micro can." The actual size of the Touch Memory is only a fraction of the dime sized cell. The chip shown can store from 1,344 to 4,096 bits of information. It can also have a "clock," or more accurately a chronometer. That's a clock that knows the year, date, and time, and can time intervals independent of the date time. Pass word protection, and compartmented memory prevent interrogation or modification of the memory. A 64 bit pass word is used. I guess you could call that; "highly pick resistant." Incorrect pass words will return random data, to confuse unauthorized



1. A GM key with the Touch Memory cell on the fob.



2. The chip inside the "micro can."



3. Touching the cell to the reader.

listeners.

The micro can is made of stainless steel. Micro can technology is an inexpensive high volume method of encapsulating electronics, that can

protect the chip from most unfriendly environments. A lithium battery, in the can, will preserve the memory for over ten years. The can looks very much like a tiny watch or camera battery. The top is one contact, and the sides and bottom form the other contact. The can is easily attached to almost anything, by adhesive or mechanical means. When attached to an ID badge, your badge becomes your key. Press the Touch Memory cell to a reader, as you see in photograph three, and you identify yourself. If you have the proper clearance for the area, the lockset electrically unlocks for you. It also collects the unique serial number of your badge, and records the time you passed through. Master keying possibilities are almost limitless. When attached to a piece of equipment, the ID badge could be used as a security device to determine whether or not you were authorized to operate the equipment. Computers or fork lifts, the same Touch Memory cell becomes your authorization. Unauthorized "tries" can be recorded by the equipment and by your Touch Memory cell. If you "try your key" in someone else's lock, you leave a "foot print," that shows the time of your "try," and exactly who "tried." In terms of security "trails," the touch memory concept is pretty unique.

Touch Memory could easily become the only key on your ring, as our automotive technology moves more toward computer controls, and away from mechanical systems.

By placing a Touch Memory cell at each of the key stations of a guards rounds, and giving the guard a "Touch Pen," as you see in photograph four, we could design a tracking method for guard services. As the guard makes his rounds, he simply touches the Touch Memory cell at each key station. When he



4. A touch pen like a security guard may use.

returns to the guard station, he touches a similar contact on a computer work station. The log, of the time he punched into each key station, carried in the touch pen, is dumped into the computer memory. If the key stations were in secure areas, he would also have a record of the time he passed through the secure barriers.

A remote secure gate or door lock might be carrying a record of all the keys that passed through that point during the day. The guard, during his rounds would pick up the record, automatically, as he made his key round. The electronic lock on a security area would not have to be hard wired into a mainframe computer, to record and keep track of the keys passing through the barrier. Unauthorized "tries" at a particular lock, would be flagged for investigation.

The security aspects of the Touch Memory are only the tip of the iceberg. The memory can be used to identify and track things. Like putting a "sticky note" on something, the cell can carry an enormous amount of information in a very small, durable, and easily accessible package.

A tray of manufactured parts could have a Touch Memory cell affixed to the tray that would identify the parts. The memory could also carry information concerning inspections completed and a record of persons that have worked on or had possession of the parts. A semi-truck trailer, loaded with freight, might have the manifest recorded on a chip. The truck backs into the dock, at a freight terminal, and as the truck bumper touches the loading platform, a single point electrical contact is made. The dock interrogates the trailers' Touch Memory chip, and

information about the contents of the truck is immediately available in the terminal office.

Turnpike patrons need not carry "change." As they get on the turnpike, the driver simply touches his turnpike ID/Pass to the unmanned terminal contact of the toll booth. The time he logged onto the turnpike, is recorded onto his chip. His name and verification of his card is made by the toll booth computer, and the gate lifts to allow him on his way. As he exits the turnpike, he again touches the button on his ID/Pass to the contact. He will be billed, or can pay cash at this point. The driver could have paid in advance, putting credits for a



5. A Touch Memory medic alert bracelet.

Continued on page 98

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From The Grave...

by Harry Houdini

Preface by Manny Weltman

When Houdini published his Conjurers Monthly Magazine between September of 1906 and August of 1908, he ran a number of episodic articles. One series was entitled "Handcuff Secrets Exposed", which he later published separately as a book; Handcuff Secrets. Chapter VII of this book was entitled "Lock Pickers." Part of this chapter was devoted to James Sargent, whom Houdini considered to be "the grand master of all historical lock pickers."

From material I recently came across, which appear to be Houdini's preliminary drafts for this chapter, it seems that he had originally intended the portion on lock picking in the book to be a more detailed article. The two slightly different drafts, entitled "Locks" and "Historical Lock Pickers," were considerably abridged for the chapter in Handcuff Secrets.

Because I feel the material to be historically interesting, I have combined and re-edited the two drafts together with the chapter in the book to make a more historically complete finished product.

My own side comments appear in brackets. I have not changed the manner in which Houdini wrote about himself in third person, referring to himself as Houdini rather than using the pronouns "I", "me" or "my".

It used to be the fashion among inventors to challenge the trade and other persons to pick locks. In some cases, even rewards were offered to anyone who could do so.

All the great lock pickers were interested in the manufacture of locks, hence their secrets remain with them, and are used for furthering their own inventions.

Very few readers of this article know the romance surrounding inventing and picking locks.

It is believed that Mr. Joseph Bramah was the first to do this, and in 1801 he displayed in his shop window in Picadilly, London, a board to which was

Historical Lock Pickers

Type quote here...

attached a padlock manufactured by himself, and which bore the following inscription, "The artist who can make an instrument that will pick or open this lock shall receive 200 guineas (about \$1,000) the moment it is produced." [1801 was the year referred to in both drafts, however, in the book, he refers to the thirty-year period of 1821-1851.]

In 1832, a Wolverhampton locksmith, having claimed to have picked eighteen Chubb locks, Mr. Chubb challenged him to open one of his locks under certain conditions.

Mr. Hart (the locksmith) tried and failed, giving the explanation that it was not the regular commercial Chubb lock, but one that had a special bridge ward.

Mr. Chubb replied that Mr. Hart did not pick any lock, but made false keys by a process of cutting blanks.

In America the great lock of Dr. Andrews in 1841 being heralded as an unpickable lock with two sets of tumblers was produced, the inventor offering \$500 to anyone who could pick this.

It was picked by Pettitt and Hall of Boston with what is known as the smoke process.

[The foregoing section regarding Hart v. the Chubb lock, and Pettitt and Hall v. Dr. Andrews' lock appeared in only one of the drafts, it did not appear in the other or in the book. The following portion on the Chubb and Brahma locks, as well as the rest of this article is a combination from all three sources.]

It was in 1851, at the Hyde Park Exposition, that the lock makers displayed and exhibited the newest, and what were considered the last word in locks, and a great controversy commenced as to their relative values.

Mr. A.C. Hobbs who had previously picked Newell's lock in Boston, Mass., on arriving from America, stated in a lecture that all the British locks could be very easily picked, and to prove this, he picked one of Chubb's patent

"Detector" locks in a few minutes. Some of those who had not been present questioned the trustworthiness of Mr. Hobbs' methods. So Mr. Hobbs wrote, a few days afterwards, stating that he would make an attempt on the following day, to pick another lock manufactured by Messrs. Chubb which was on a strongroom door, and in use every day. Although Messrs. Chubb knew of this attempt, they did not send anyone to witness the affair.

A certificate, duly signed by a committee that had been appointed, stated that Mr. Hobbs opened the lock at the Crystal Palace in London within twenty-five minutes, and on being requested to lock it again, did so in seven minutes, there being no injury of any kind to the lock.

Mr. Hobbs then turned his attention to the Bramah lock that was hanging in the shop window in Picadilly, and accepted the challenge. Having obtained permission from the Messrs. Brahma and Co. to try his skill in opening said lock, all arrangements were made on July 23, 1851. A committee of gentlemen got together, and the lock was enclosed in a block of wood and screwed to a door; the screws were sealed, leaving only the lock hole and hasp accessible to Mr. Hobbs. Thirty days was given for the picking of the lock; if by that time, the lock had not been picked, failure was to be admitted by Mr. Hobbs. An immense amount of controversy waged around this challenge and acceptance.

It was on the 24th of July that the attempt was started, and while Mr. Hobbs was not at work at the keyhole, it was covered with a band of iron and sealed, so that no person could tamper with it.

The correct key had been sealed up, and could not be used by anyone until the attempt was over.

After spending more than sixteen days in preparation and fifty hours in

the room with the lock, on Saturday, August 30, 1851, Hobbs fairly opened the lock for the committee. The lock was then relocked by Mr. Hobbs, and the original key was being tried, it was found that the lock acted perfectly, and no injury of any kind had been done.

The committee, therefore, was of the opinion that Mr. Hobbs had carried out his bargain, winning thereby the 200 guineas that for fifty [or thirty?] years no one was able to claim.

A 200 guinea challenge had been thrown out by Newell, an American firm, to pick their lock which was being exhibited by Mr. Hobbs. An engineer named Garbutt, known as an expert, took up the challenge. Mr. Garbutt was employed at the Crystal Palace in the adjustment of, and looking after, the cheque tables and pay places, and had previously been in the employ of Messrs. Brahma. After thirty days, the Newell lock still defied his attempts, and he had to give up the job.

In 1852, a Mr. Smith accepted the Newell offer, but suggested that a bank lock with ten tumblers should be substituted in the place of the exhibition lock of fifteen tumblers. These terms were agreed to by Mr. Hobbs. Mr. Smith thereupon decided the acceptance of the challenge should be withdrawn.

The controversy still continued in 1858, when Mr. Linus Yale, Jr., of the now celebrated firm, boasted manufacturing an unpickable lock. Yale had discovered how to pick the then celebrated Day and Newell Parautopic Bank Lock. It was of American origin, and was known in England as "the Hobbs Lock", but was the invention of a Mr. Pyle.

Then Yale also discovered that he could pick the best bank lock—the Double Treasury, which he himself had

designed—and eventually demonstrated that any lock having a keyhole could be opened by any expert with the necessary skill and time at his disposal.

Accordingly, Mr. Yale proceeded to develop the combination or dial lock.

And Yale, in turn, had his lock picked open by James S. Sargent, of the firm of Sargent and Greenleaf, leading makers of bank locks, and inventor of the time lock.



Sargent took nine hours to pick the Yale double dial bank lock on October 13, 1869. It had been agreed he was to be allowed forty-eight working hours to accomplish this. He received \$1,200 for the task. The NEW YORK TIMES of October 14, 1869, had a very good account of this match. [A thorough account of this contest, including a reprint of the October 14, 1869 NEW YORK TIMES clipping, appears in Chapter XIV of the book.]

The controversy seemed to die down, until again in 1905 the American

papers stated that a young man named Houdini, who had succeeded in escaping from every kind of manacle, from police cells, and from practically any method of confinement, had the audacity to pick one of Sargent's locks. Houdini bearded the lion in his den by escaping from a police cell in Rochester, NY, which was securely locked with one of the Sargent and Greenleaf locks, placing himself on record as one of the great lock pickers of the world.

Of the thousands of locks he has picked all over the world, the following police certificate places him among the historical lock pickers, in fact second to none:

**P o l i c e
H e a d q u a r t e r s ,
R o c h e s t e r , N Y , U . S . o f
A m e r i c a**

We, the undersigned, certify that we saw Harry Houdini, the bearer of this note, stripped naked, searched, locked in one of the cells at Police Headquarters and handcuffed with three pairs of cuffs, also strapped with a strap extending from pair of cuffs and buckled at the back.

He removed the cuffs, unlocked the cell, got into an adjoining cell and returned with his clothes on.

After unlocking the cell in which he was placed, he had to unlock the cell in which his clothing was left.

This was witnessed by the following persons at Police Headquarters, this city, December Fourth 1905.

J.C. Hayden
Chief of Police

(Now follow a list of witnesses present. Note: The list of witnesses does not appear in any materials used in this article.)

Mr. James Sargent personally complimented Houdini on his rare skill. They became friends and spent hours together exchanging lock opening secrets. §

The Lighter Side

"Come Away With Me, Lucile..."



by Sara Probasco

"We need to start a junkyard," Don said one evening as he scrubbed graphite from around his fingernails at the kitchen sink.

"I thought we already had, in the back room of the shop," I replied.

He remained undaunted. "I mean an auto-parts yard for all these antique cars people are working on, these days. We had another guy in today."

"That makes the third one, this week, doesn't it?"

"Yeah. This one needed to take the locks out of a junker '57 Cadillac to install in a matching 'keeper' he's restoring. He's trying to get everything back to the original in the one he's working on."

"That must be quite a job," I said.

"He got really excited over the possibility of an original jack being in the trunk, and the remote idea of finding the cardboard trunk lining intact was sending him into ecstasy." Don shook his head and smiled, remembering the man's excitement.

"Well, don't keep me in suspense. Did you get the trunk open for him? Was everything in it as he had hoped?"

"Not yet. That old wreck can't be driven. He found it out in the country with weeds growing over it and got permission from the land-owner to haul it off. Apparently, nobody has any idea who dumped it or how long it's been there, and there are no keys to it, needless to say. Right now, he's trying to take out the glove-box lock to bring to our shop, so we'll probably be making a secondary key for him today. We'll just hope the glovebox and the trunk still use the same key, so my job will be easy." Don's eyes

twinkled. "He keeps talking about how there might be something of real value locked inside. I said, 'Maybe, even, Jimmy Hoffa.' He didn't think that was so funny."

"What do people do with those old cars, once they get them restored and running?" I asked, ignoring his last remarks.

"Why, that's big business, these days! Don't you remember the antique car enthusiasts who gathered here in Uvalde a couple of years ago? There were dozens of sparkling vintage vehicles parked all over the Holiday Inn's parking lot. Remember? They had security guards posted all around, and had the lot roped off to keep people from putting their hands on the finishes?"

"I remember. But that's not what I meant. What do people really DO with those cars, other than drive them in parades and take them to auto shows? Do they ever really enjoy driving them, or are they too afraid somebody with breathe on them?"

Without comment, Don walked to the table in the den where he stacks various reading material, and began leafing through one of the newspapers there. "Here," he said, returning to the kitchen. "Did you see the paper, yesterday?"

"Not yet," I replied, adding a little liquid to the stir-fry vegetables I was preparing. I placed a lid on, to let them steam for a minute, and turned my attention to the article Don had exposed for my edification.

"You remember when Andy came into our shop a couple of weeks ago to get a key made for an old fire engine he had bought somewhere—in Missouri, I think?"

"Yes."

"Well, read this."

I took the paper from him. Pictured, was a bridal couple seated in an open-top vehicle. Although it was difficult to tell exactly what kind of vehicle it was, from the picture, the article clarified this situation.

The 1931 fire engine had piqued

the interest of our friend as the result of his seeing an ad in an antique-car publication to which he subscribed. After exchanging a multitude of photographs and correspondence with the owner, he had chosen to purchase the vehicle, thinking it would be an interesting novelty and a restoration project he would enjoy undertaking.

His daughter fell in love with the cableless, stub-nosed little fire truck, commenting that it reminded her of the wheeled character in a book she had enjoyed as a child. Then she came up with the unusual idea of using it as a get-away vehicle at her upcoming wedding.

Shifting into high gear, her father called in various finishing experts and soon had the vehicle spinning like a top, with a shiny exterior that would rival a brand-new vehicle. The bridal couple made their escape amid the clanging of its bell and the wailing of its siren as they sped away into the glowing sunset and honeymoon bliss.

"And besides that," I heard Don saying as I came back to reality, "just last week I ran into a restored '52 limousine that was a beaut."

"You haven't told me about that," I replied.

"I believe that was the service call that came in last Tuesday morning, just as you were leaving for Houston."

"Oh, yes. It was up river, somewhere, wasn't it?"

"Right. Well, that was one of those situations where the guy gave me directions like, 'cross the second river, turn left past the quicksand pit, and keep going until you see a big live oak tree with a yellow ribbon painted on it.' You know the kind."

"I'm afraid I do," I replied, smiling.

"Anyhow, he said they were picnicking off up there somewhere, beside the river, and his wife accidentally locked the keys up in the car. He had to walk a couple of miles before finding a telephone.

Continued on page 98

Beginner's Corner

Residential Door Service



by Eugene Gentry

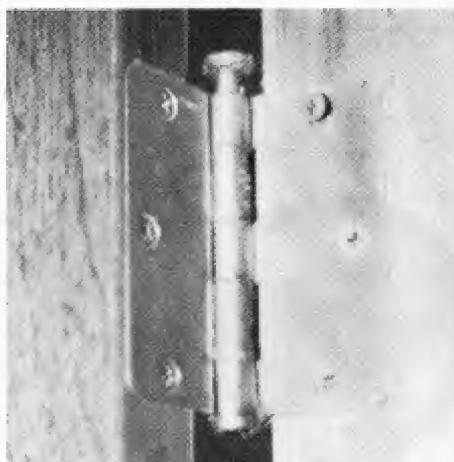
There is money to be made working on residential doors. These include entry doors, interior doors, screen doors and sliding glass doors. However for the locksmith, some of the work borders on handyman and carpentry work.

Lately I have had quite a few calls for residential doors that will not latch, doors that will not open and doors that either stick or leak air. Along with these calls are complaints of deadbolts that are hard to retract or will not lock, glass doors that are difficult to slide, and screen doors with broken handles or latches.

Some of these problems are caused by loose or worn hinges, worn or dirty latches or doors that have swelled from humidity. Some are caused by buildings settling, pushing the doors out of plumb. Last year I worked on over fifty interior doors in an apartment complex where two of the buildings had settled. The solutions to some of these problems involve some carpentry work, which the locksmith can do if he wishes to add to his income.

For door complaints, check the hinges first to see if there are any loose screws. Pull up and down on the door to see if the pins are tight. (See photograph 1.) If there is play in the hinges, suggest that new ones be installed.

Proceed now to check the latch on the door. Close the door, but just before it latches, put a small pencil mark on the jam at the bottom or top of the latch. Open the door to see if the latch is lining up with the striker. (See photograph 2.) If it is not entering the striker, then the striker has to be adjusted. If the latch is within 1/16" or 1/8" of entering, then you can file,



1. Loose pin and screw on hinge.



2. Be sure latch lines up with striker.

or use a cordless rotary drill to enlarge the interior of the striker. If the gap is larger you may have to move the striker up or down. Remove the striker, then chisel out the jam the distance needed. Replace striker and fill in the gap left on the jam with some repair putty. To do a neat job, the jam should be touched up with a matching paint.

You may have to move the striker forward or back if the door is so tight it will not close or so loose that it leaks air. Remove the striker, then fill the old screw holes with wood. Drill new holes to accommodate the new location of the striker.

It may be the latch that is causing the trouble. Turn the door handle several times to see if the latch is retracting and releasing completely. If it is not retracting all the way, then the door may be difficult to open. Remove

the door handle, then remove the two screws that hold in the latch and pull it out. Examine the moving parts on the latch for wear, and check the spindle that goes through the latch. (See photograph 3.) Replace the whole door knob set if there is wear on the knob parts and latch. If it just the latch that is causing trouble, then replace it.



3. Inspect knob spindle and latch hole for wear.

Doors that are binding or will not close require some carpentry work. Sometimes you will be able to do some sanding or planing on the edge of the door while it is still hung. If the building has settled, then you will have to remove the door to work on it. To do this, just remove the pins in the hinges. Before it is removed, make pencil marks on the door at the places it is binding. Use a hand plane and sandpaper on the edges until the door fits properly. A power planer makes short work on doors.



4. Hole at bottom corner of sliding glass door has recessed adjusting screw to adjust wheels.

Letters

Continued from page 6

Stainless Steel resemble spring steel - extremely resistant to bending, drilling or sawing.

When you see the results of such a test, it becomes so visibly evident that producing and distributing inferior products is a crime in itself. You're doing a major disservice to your customer. How can this greedy attitude be turned around? Or can it be changed? You bet it can! But it means we all must step forward and say "No, I won't tolerate inferior quality." "No, I won't tolerate unethical business practices." "No, I won't tolerate fraud." "No, I won't compromise high quality."

When someone else comes out with a similar product, we say "Great." Someone else recognizes the need for such a product as we have. As I stated before, most legitimate manufacturers do not object to good, honest competition. If you can manufacture a similar product using quality materials and because you use more efficient processes can sell it for less, I say "Go For It." But when a foreign bandit copies your product and cheapens their copy-cat product, that degrades our high quality product that has been on the market for nineteen years and doing a great job.

Now comes this foreign product using inferior materials that looks like Scotsman DorGard II and it starts being defeated. Are they going to say that the cheap product failed? Probably not. The more likely response will be that Scotsman's DorGard II has failed. Did it? Of course not!

Do we care? We all should care. We at Scotsman care. We work hard to develop products that are high in quality, designed to do a specific job efficiently, be easy to install and be an attractive addition to your customer's door, all at a cost as low as possible as to be affordable to the end user. Do we care? Absolutely! Do you?

I want to emphatically state "we are not asking for protectionism." In fact, we do not believe in protectionism. However, we are asking that this type of bandit as we described above be punished. If not with laws, then by this industry refusing to be involved in their fraudulent marketing schemes.

Bob Irmer
President, Scotsman Security
California

Manufacturer Profiles

Continued from page 41

Stanley Hardware

Stanley Hardware has been serving the building products industry since its inception in 1843. Early manufacturing "firsts" credited to Stanley include most of the hinges used throughout the building trade. The first patent for a hinge with ball bearings was given to Stanley in 1889 and today the company's continued dedication to quality and innovation has led to many successful product introductions.

Stanley is the only manufacturer to provide a series of hinges that are guaranteed for the life of the building. LifeSpan hinges incorporated a revolutionary concept in bearing construction and materials - the LifeSpan bearing - combining recent technology with materials of the highest quality. Extremely close tolerances and high manufacturing precision are required. The result is a LifeSpan hinge with a lifetime guarantee. Stanley is the only manufacturer with a gear continuous hinge guaranteed for life. The 500 series continuous hinge is made of extruded aluminum and incorporates a bearing that is virtually friction and wear free. Full surface, full mortise, and half surface versions of the hinge are available. Stanley offers a UL listing for hollow metal doors up to three hours.

Though still headquartered in New Britain, CT, Stanley Hardware maintains manufacturing facilities and distribution centers nationwide. Products are inventoried and available for immediate delivery from warehouses in San Dimas, CA, Kansas City, and Richmond. In addition to architectural hinges that remain the industry's standard, Stanley also offers a complete line of cabinet hardware, bifold and sliding door hardware, residential hinges, mirror doors, and closet organizer systems.

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Circle 362 on Rapid Reply

Steadfast Corporation

Steadfast Corporation was founded in 1982 in Chelsea, Massachusetts, as a custom designer and fabricator of specialty metal products for automotive and truck security, aerospace and other industries.

First formed to manufacture and market a device for the prevention of car thefts, Steadfast has become a leader in the auto anti-theft business. Initial Sales of the Steadfast Security Collar for GM and Jeep vehicles were targeted at the

rental car market to prove the device's effectiveness and reliability.

As word spread of the success of the devices, the company appointed distributors in high theft areas. The product has developed a strong appeal in the locksmith trade because of its reputation, the purely mechanical design, and profit margin.

More recently, Steadfast has introduced its Ignition Guard line of hardened steel deterrents for the Chrysler Aerostar column and Mazda, with Toyota to follow shortly. In addition, a series of retail display products under the brand name "Pop & Lock" has been introduced. These products are designed to lock the tailgate and hoods of GM, Dodge and Ford pickup trucks, are easily installed, and made of the same hardened steel as the Steadfast Collar and Ignition Guard line.

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Touch Memory

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specific number of trips into his ID/Pass card. How about frequent rider passes on the bus and transit lines?

If you have a health problem, you might wear a MEDIC-ALERT badge. A Touch Memory, worn on a bracelet or necklace, could have a complete medical history and special instructions in its memory. In the hospital, a Touch memory cell on your ID bracelet, as in photograph five could be programmed at the admittance desk. It would have your doctors name, problem and even be a record of medications you are taking. Each time a medication is administered, it would be logged onto your bracelet. Who administered the medication, and the time it was given would become a permanent record.

There are many more applications for this "dime sized wonder," but I'm sure you can think of and describe them better than I. After all, applications for new technology are only limited by your imagination.

For more information on this Technology, call Mark Glick at Dallas Semiconductor, (214) 450-3731. §

The Lighter Side

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"Following his directions, I had just topped the hill and was starting down toward the river when there it was: a sleek, black, completely restored 1952 Cadillac limousine with a travel trailer attached. The family was all in the trailer, playing Monopoly, when I got there."

Don chuckled. "He sure was nervous about how I was going to get into the car. He didn't want any scratches on the finish."

"Can you blame him?" I asked.

"Not at all," Don replied. "The thing was, I began to get nervous at the way he kept looking at me. At first, I thought there was something wrong with his eyes, because he never seemed to look directly at me. Then I realized he was admiring my cap. He wanted one like it to wear when he drives the limo, so I wound up selling it to him."

"You didn't!" I said. "Your favorite, trademark hat? never thought I'd see the day you would part with it."

"Don't get your hopes up quite yet." Don's eyes twinkled. "The guy was so used to shelling money out on that limousine, he insisted on paying me a premium. I took the money and bought four new caps just like it." §

Beginner's Corner

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Sometimes customers will ask to have a new door installed. This happens in apartment complexes where angry tenants have kicked holes in interior or exterior doors or with residential doors that have become weather worn. If you have had carpentry training on how to hang a door, this is a good chance to pick up some extra money.

The sliding glass doors fail to work properly when the guide channels become dirty or the wheels begin to wear. Clean the guide channels and adjust the wheels. At the bottom corners of the door is a hole about 1/4 inch in diameter. (See photograph 4.) Some doors have two holes. The top hole has a recessed screw that holds the door together. The adjusting screw is located in the bottom hole and is recessed about 1/2". Both a thin Phillips screwdriver or blade screwdriver will turn the adjusting screw. Adjust both sides of the door so it lines up with the jam. If the door is adjusted upward, you will probably have to adjust the latch hook on the jam.

Sliding screen doors do not work, most of the time, because the plastic wheels on the bottom break. Handles, latches, wheels and other parts for glass and screen doors can be found at most hardware stores.

In conclusion, one advantage of working on residential doors is that, while on the job site, customers will ask about beefing up security for the doors and windows. This gives you a chance to install locks, alarms, or whatever security devices you think are necessary. §



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